SPORTON LAB.

Certificate No: FD251532

CERTIFICATE OF COMPLIANCE

Authorized under Declaration of Conformity
according to
47 CFR,Part 2 and Part 15 of the FCC Rules

Equipment : Network Attached Storage
Model No. : N7510, NDL-2755T
Applicant : Thecus Technology Corp
15F., No. 79, Sec. 1, Sintai 5th Rd., Sijhih Dist,
New Taipei City 221, Taiwan

SPORTON LAB.

I HEREBY **CERTIFY THAT:**

THE MEASUREMENTS SHOWN IN THIS TEST REPORT WERE MADE IN ACCORDANCE WITH THE PROCEDURES GIVEN IN **ANSI C63.4 - 2009** AND THE ENERGY EMITTED BY THIS EQUIPMENT WAS ***PASSED*** **CISPR PUB. 22 and FCC Part 15** in BOTH RADIATED AND CONDUCTED EMISSIONS **Class B** LIMITS.
THE PRODUCT SAMPLE RECEIVED ON Nov. 26, 2012 AND COMPLETELY TESTED ON **Dec. 07, 2012** AT **SPORTON INTERNATIONAL INC.** LAB.

Jack Deng
Engineering Manager

TAF
Testing Laboratory
1190

Testing Laboratory
1190

FCC TEST REPORT

Authorized under **D**eclaration **o**f **C**onformity

according to

47 CFR FCC Rules and Regulations Part 15 Subpart B,

Class B Digital Device

Equipment	:	Network Attached Storage
Model No.	:	N7510, NDL-2755T
Filing Type	:	Declaration of Conformity
Applicant	:	**Thecus Technology Corp** 15F., No. 79, Sec. 1, Sintai 5th Rd., Sijhih Dist, New Taipei City 221, Taiwan

Statement

- The test result refers exclusively to the test presented test model / sample.
- Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.
- Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsement by TAF or any agency of U.S. government.

SPORTON International Inc.

6F, No. 106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

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History of this test report

Report No.	Version	Issue Date	Description
FD251532	Rev.01	Dec. 11, 2013	Initial issue of report

Certificate No. : FD251532

CERTIFICATE OF COMPLIANCE

Authorized under **D**eclaration **o**f **C**onformity

according to

47 CFR FCC Rules and Regulations Part 15 Subpart B,

Class B Digital Device

Testing Laboratory 1190

Equipment	:	Network Attached Storage
Model No.	:	N7510, NDL-2755T
Applicant	:	**Thecus Technology Corp** 15F., No. 79, Sec. 1, Sintai 5th Rd., Sijhih Dist, New Taipei City 221, Taiwan

I **HEREBY** CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 - 2009** and the energy emitted by this equipment was ***passed*** **CISPR PUB. 22 and FCC Part 15** in both radiated and conducted emission **Class B** limits.

The product sample received on Nov. 26, 2012 and completely tested on ***Dec. 07, 2012*** at **SPORTON International Inc.** LAB.

Jack Deng
Engineering Manager

SPORTON International Inc.

6F, No. 106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

1. General Description of Equipment under Test

1.1. Applicant

Thecus Technology Corp

15F., No. 79, Sec. 1, Sintai 5th Rd., Sijhih Dist, New Taipei City 221, Taiwan

1.2. Manufacturer

Same as 1.1

1.3. Basic Description of Equipment under Test

Equipment	:	Network Attached Storage
Model No.	:	N7510, NDL-2755T
Trade Name	:	Thecus, Starline
RJ45 Cable	:	Non-Shielded, 20 m
RJ45 Cable	:	Non-Shielded, 1.85 m
Power Supply Type	:	Switching Power Supply
AC Power Cord	:	Non-Shielded, 1.8 m, 3 pin

1.4. Feature of Equipment under Test

Please refer to user manual.

1.5. Modification of EUT

Please refer to the Photographs of EUT.

2. Test Configuration of Equipment under Test

2.1. Test Manner

a. During testing, the personal computer and equipment positions were varied according to ANSI C63.4-2009 and configuration operated in a manner which tended to maximize its emission characteristics in a typical application.

b. The equipment under test were performed the following test modes:

Test Items	Function Type
AC Conducted Emission	Mode 1. POWER:Enhance Flex-0130D, 300W, HDMI OUT, LAN1:R/W, LAN1+LAN2:1G Mode 2. POWER:Enhance Flex-0130D, 300W, D-SUB OUT, LAN2:R/W, LAN1+LAN2:1G Mode 3. POWER:Enhance Flex-0130D, 300W, HDMI OUT, LAN1:R/W, LAN1+LAN2:100M Mode 4. POWER:Enhance Flex-0130D, 300W, HDMI OUT, LAN1:R/W, LAN1+LAN2:10M Cause “mode 1” generated the worst test result; it was reported as final data.
Radiated Emissions	Mode 1. POWER:Enhance Flex-0130D, 300W, HDMI OUT, LAN1:R/W, LAN1+LAN2:1G Mode 2. POWER:Enhance Flex-0130D, 300W, D-SUB OUT, LAN2:R/W, LAN1+LAN2:1G Mode 3. POWER:Enhance Flex-0130D, 300W, HDMI OUT, LAN1:R/W, LAN1+LAN2:100M Mode 4. POWER:Enhance Flex-0130D, 300W, HDMI OUT, LAN1:R/W, LAN1+LAN2:10M **< below 1GHz >** Cause “mode 1” generated the worst test result; it was reported as final data. **< above 1GHz >** Cause “mode 1” is highest frequency of the internal sources of the EUT; it was reported as final data.

c. Frequency range investigated: Conduction 150 kHz to 30 MHz, Radiation 30 MHz to 11,000 MHz.

2.2. Description of Test System

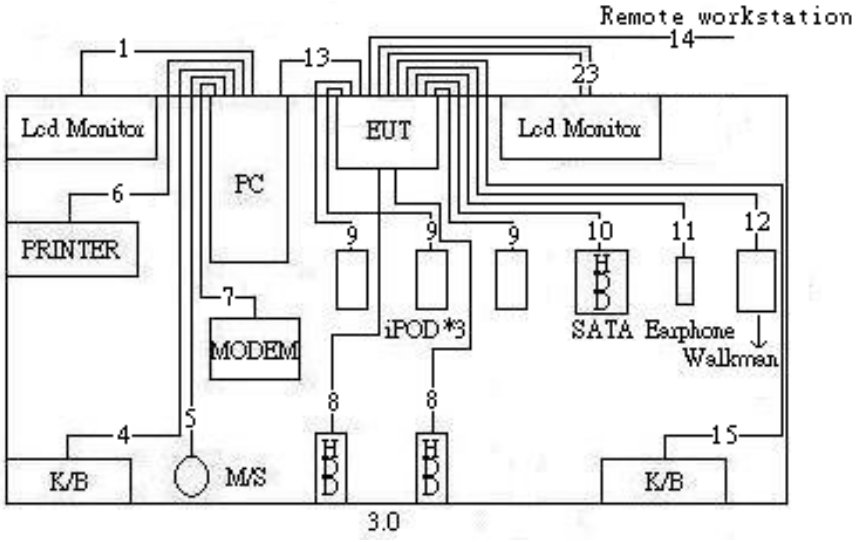
< EMI ><Conducted and Radiated below 1GHz>

No.	Peripheral	Manufacturer	Model Number	FCC ID	Cable / Spec. Description
For Local					
1	Personal Computer	DELL	DCTA	DOC	-
2	LCD MONITOR	DELL	E198WFPF	DOC	D-SUB Cable, D-Shielded, 1.8m
3	LCD MONITOR	DELL	U2410	DOC	D-SUB Cable, D-Shielded, 1.8m HDMI Cable, D-Shielded, 1.5m
4	Keyboard *2	DELL	SK-8175	DOC	USB Cable, AL-F-Shielded, 1.8m
5	MOUSE	DELL	MOC5UO	DOC	USB Cable, AL-F-Shielded, 1.8m
6	Printer	HP	C2642A (DJ400)	B94C2642X	LPT Cable, D-Shielded, 1.2m
7	Modem	ACEEX	DM1414	IFAXDM1414	RS232 Cable, D-Shielded, 1.15m
8	USB 3.0 HDD *2	PQI	H566	DOC	USB Cable, D-Shielded, 1.0m
9	USB 2.0 iPod*3	APPLE	A1137	DOC	USB Cable, D-Shielded, 1.0m
10	SATA HDD	EXCEDING	MAP-AD21CS	DOC	SATA Cable, D-Shielded, 1.0m
11	Headset	i-Acon	HOH-323-BK	N/A	Audio Cable, Non-Shielded, 2.0m
12	Walk Man	KOKA	KW-246	N/A	Audio Cable, Non-Shielded, 1.7m
For Remote					
-	Personal Computer	DELL	DCTA	DOC	-
-	LCD MONITOR	DELL	E198WFPF	DOC	D-SUB Cable, D-Shielded, 1.8m
-	Keyboard	DELL	SK-8175	DOC	USB Cable, AL-F-Shielded, 1.8m
-	MOUSE	DELL	MOC5UO	DOC	USB Cable, AL-F-Shielded, 1.8m

< EMI ><Radiated above 1GHz>

No.	Peripheral	Manufacturer	Model Number	FCC ID	Cable / Spec. Description
For Local					
1	Personal Computer	DELL	DCTA	DOC	D-SUB Cable, D-Shielded, 1.8m
2	LCD MONITOR	DELL	2408WFPb	DOC	D-SUB Cable, D-Shielded, 1.8m HDMI Cable, D-Shielded, 1.5m
3	LCD MONITOR	DELL	E198WFPf	DOC	D-SUB Cable, D-Shielded, 1.8m
4	Keyboard *2	DELL	SK-8175	T3A002	USB Cable, AL-F-Shielded, 1.8m
5	MOUSE	DELL	MOC5UO	R41108	USB Cable, AL-F-Shielded, 1.8m
6	Printer	HP	C2642A (DJ400)	B94C2642X	LPT Cable, D-Shielded, 1.2m
7	Modem	ACEEX	DM1414	IAXDM1414	RS232 Cable, D-Shielded, 1.15m
8	Headset	i-Acon	HOH-323-BK	N/A	Audio Cable, Non-Shielded, 2.0m
9	Walk Man	AIWA	HS-JS165	DOC	Audio Cable, Non-Shielded, 1.8m
10	USB 2.0 iPod *3	APPLE	A1137	DOC	USB Cable, D-Shielded, 1.0m
11	SATA HDD	EXCEDING	MAP-AD21CS	DOC	SATA Cable, D-Shielded, 1.0m
12	USB3.0 HDD *2	PQI	H566	DOC	USB Cable, D-Shielded, 1.8m
For Remote					
-	Notebook	DELL	PP05L (D600)	DOC	RJ45 cable , Non-Shielded, 20m

2.3. Connection Diagram of Test System



1. The D-SUB cable is connected from the PC to the support unit 2.
2. The D-SUB cable is connected from the EUT to the support unit 3.
3. The HDMI cable is connected from the EUT to the support unit 3.
4. The USB cable is connected from the PC to the support unit 4.
5. The USB cable is connected from the PC to the support unit 5.
6. The LPT cable is connected from the PC to the support unit 6.
7. The RS232 cable is connected from the PC to the support unit 7.
8. These USB cables are connected from the EUT to the support unit 8.
9. These USB cables are connected from the EUT to the support unit 9.
10. The SATA cable is connected from the EUT to the support unit 10.
11. The Audio cable is connected from the EUT to the support unit 11.
12. The Audio cable is connected from the EUT to the support unit 12.
13. The RJ45 cable is connected from the PC to the EUT.
14. The RJ45 cable is connected from the EUT to the remote workstation.
15. The USB cable is connected from the EUT to the support unit 4.

Note: Above support unit on behalf of the meaning, please refer to section 2.2.

3. Test Software

Two executive programs, “EMIprogram.exe & EMITEST.exe” under WIN XP, which generate a complete line of continuously repeating "H" pattern were used as the test software.

The program was executed as follows:

a. Turn on the power of all equipment.
b. The PC reads the test program from the hard disk drive and runs it.
c. The PC sends "H" pattern to the monitor, and the monitor displays "H" patterns on the screen.
d. The PC sends "H" messages to the printer, and then the printer prints them on the paper.
e. The PC sends signal messages to the modem.
f. The PC sends signal messages to the internal Hard Disk, and the Hard Disk reads and writes the message.
g. Repeat the steps from c to f.

At the same time, the following program was executed:

- Executed “Winthrax.exe” to read and write data from EUT and external USB Drive.

During the test, the following program under Win XP from remote workstation was executed:

- Executed “Ping.exe” to link with the EUT to maintain the connection via RJ45 cable.

4. General Information of Test

4.1. Test Facility

Test Site：SPORTON INTERNATIONAL INC.

Test Site Location : No. 3, Lane 238, Kang Lo Street, Nei Hwu District, Taipei 11424, Taiwan, R.O.C.
TEL : 886-2-2631-4739
FAX : 886-2-2631-9740

Test Site No. : CO01-NH, OS02-NH

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiag, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055

Test Site No. : 03CH04-HY

4.2. Uncertainty of Test Site

Test Items	Test Site No.	Uncertainty	Remark
Conducted Emissions	CO01-NH	± 2.62dB	Confidence levels of 95%
Radiated Emissions below 1GHz	OS02-NH	± 3.04dB	Confidence levels of 95%
Radiated Emissions above 1GHz	03CH04-HY	± 4.78dB	Confidence levels of 95%

4.3. Test Voltage

AC 120V / 60Hz

4.4. Measurement Procedure

ANSI C63.4-2009

4.5. Test in Compliance with

CISPR PUB. 22 and Part 15 Subpart B
15.107 Conducted Emission
15.109 Radiated Emission

4.6. Frequency Range Investigated

a. Conducted emission test: from 150 kHz to 30 MHz
b. Radiated emission test: from 30 MHz to 11,000 MHz

4.7. Test Distance

a. The test distance of radiated emission test from antenna to EUT is 10 M (from 30MHz~1GHz).
b. The test distance of radiated emission test from antenna to EUT is 3 M (from 1GHz~11GHz).

5. Test of Conducted Powerline

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz and return leads of the EUT according to the methods defined in ANSI C63.4-2009 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meter above the ground plane as shown in section 5.3. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

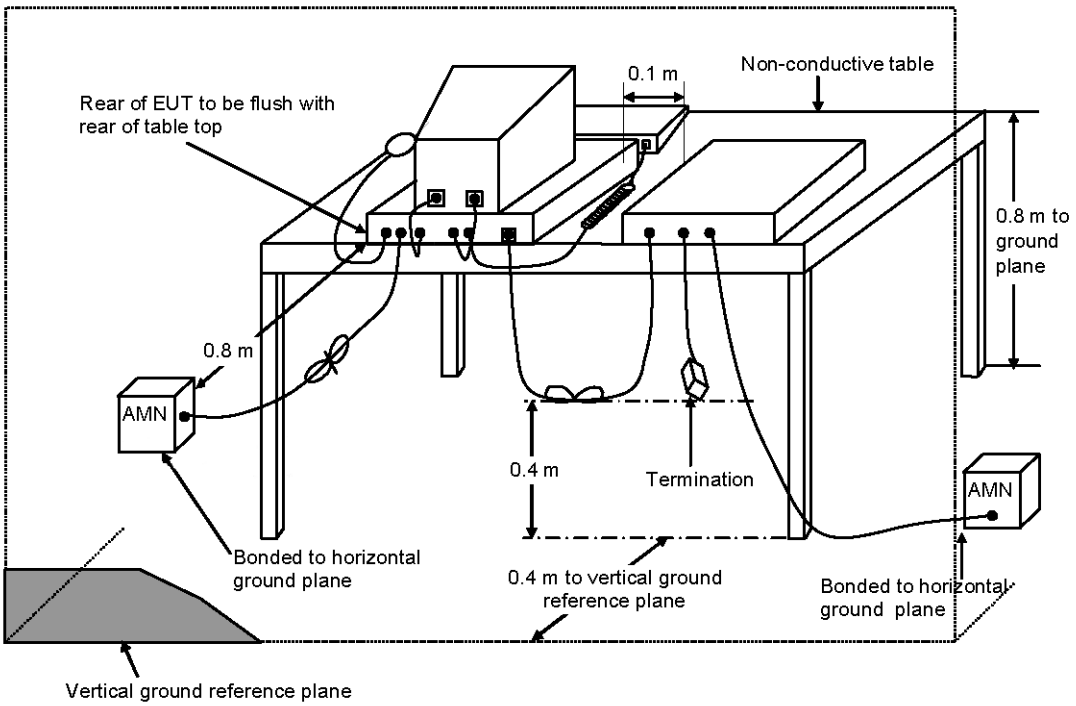
5.1. Description of Major Test Instruments

Test Receiver Parameters	Setting
Test Receiver	R&S ESCS 30
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz
Signal Input	9 kHz - 2.75 GHz

5.2. Test Procedures

a. The EUT was warmed up for 15 minutes before testing started.
b. The EUT was placed on a desk 0.8 meters height from the metal ground plane and 0.4 meter from the conducting wall of the shielding room and it was kept at least 0.8 meters from any other grounded conducting surface.
c. Connect EUT to the power mains through a line impedance stabilization network (LISN).
d. All the support units are connect to the other LISN.
e. The LISN provides 50 ohm coupling impedance for the measuring instrument.
f. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
g. Both sides of AC line were checked for maximum conducted interference.
h. The frequency range from 150 kHz to 30 MHz was searched.
i. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

5.3. Typical Test Setup Layout of Conducted Powerline

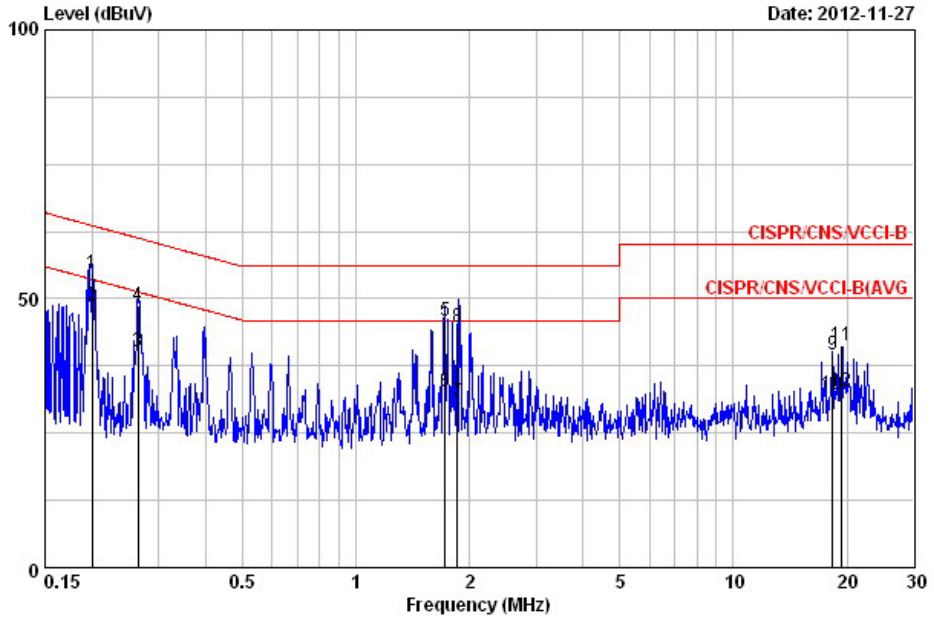


a. AMN is 80 cm from the EUT and at least 80 cm from other units and other metal planes.
b. EUT is connected to one artificial mains network (AMN).
c. All other units of a system are powered from a second AMN. A multiple outlet strip can be used for multiple mains cords.
d. Rear of EUT to be flushed with rear of table top.
e. Peripherals shall be placed at a distance of 10 cm from each other and from the controller, except for the monitor which, if this is an acceptable installation practice, shall be placed directly on the top of the controller.
f. If cables, which hang closer than 40 cm to the horizontal metal ground plane, cannot be shortened to appropriate length, the excess shall be folded back and forth forming a bundle 30 cm to 40 cm long.
g. Mains cords and signal cables shall be positioned for their entire lengths, as far as possible, at 40 cm from the vertical reference plane.
h. Cables of hand operated devices, such as keyboards, mice, etc. shall be placed as for normal usage.

5.4. Test Result of AC Powerline Conducted Emission

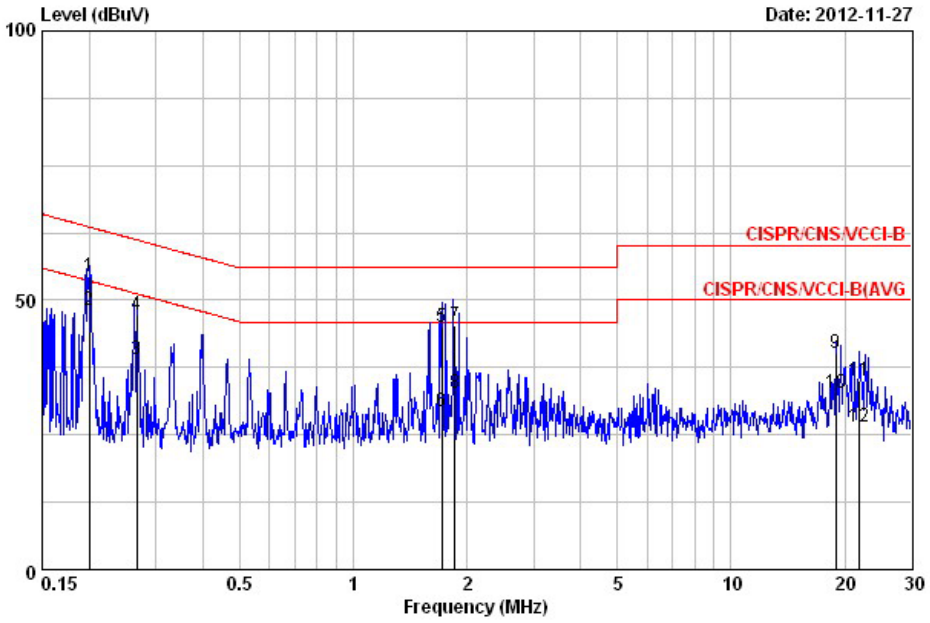
Test Mode	Mode 1	Test Site No.	CO01-NH
Test Frequency	0.15 MHz ~ 30 MHz	Test Engineer	Eddie
Temperature	23 ℃	Relative Humidity	58 %
Note: 1. Corrected Reading (dBμV) = LISN Factor + Cable Loss + Read Level = Level			
2. All emissions not reported here are more than 10 dB below the prescribed limit.			
■ The test was passed at the minimum margin that marked by the frame in the following data			

Line



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.200	54.70	-8.92	63.62	44.43	10.17	0.10	QP
2 @	0.200	48.59	-5.03	53.62	38.32	10.17	0.10	AVERAGE
3	0.264	40.19	-11.10	51.29	29.92	10.17	0.10	AVERAGE
4	0.264	48.67	-12.62	61.29	38.40	10.17	0.10	QP
5	1.725	45.97	-10.03	56.00	35.59	10.21	0.18	QP
6	1.725	32.79	-13.21	46.00	22.41	10.21	0.18	AVERAGE
7	1.859	30.89	-15.11	46.00	20.49	10.21	0.19	AVERAGE
8	1.859	44.70	-11.30	56.00	34.30	10.21	0.19	QP
9	18.336	39.54	-20.46	60.00	28.83	10.44	0.27	QP
10	18.336	32.20	-17.80	50.00	21.49	10.44	0.27	AVERAGE
11	19.396	41.21	-18.79	60.00	30.47	10.45	0.29	QP
12	19.396	32.68	-17.32	50.00	21.94	10.45	0.29	AVERAGE

Neutral



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.200	54.37	-9.25	63.62	44.13	10.14	0.10	QP
2 @	0.200	48.29	-5.33	53.62	38.05	10.14	0.10	AVERAGE
3	0.267	39.13	-12.08	51.20	28.89	10.14	0.10	AVERAGE
4	0.267	47.39	-13.82	61.20	37.15	10.14	0.10	QP
5	1.717	44.96	-11.04	56.00	34.61	10.17	0.18	QP
6	1.717	29.42	-16.58	46.00	19.07	10.17	0.18	AVERAGE
7	1.856	45.35	-10.65	56.00	34.98	10.18	0.19	QP
8	1.856	32.75	-13.25	46.00	22.38	10.18	0.19	AVERAGE
9	18.930	40.28	-19.72	60.00	29.56	10.44	0.28	QP
10	18.930	32.70	-17.30	50.00	21.98	10.44	0.28	AVERAGE
11	21.838	35.13	-24.87	60.00	24.30	10.49	0.34	QP
12	21.838	26.59	-23.41	50.00	15.76	10.49	0.34	AVERAGE

6. Test of Radiated Emission

Radiated emissions from 30 MHz to 11,000 MHz were measured with a bandwidth of 120 kHz for 30 MHz to 1000 MHz and 1 MHz for above 1GHz according to the methods defines in ANSI C63.4-2009. The EUT was placed on a nonmetallic stand, 0.8 meter above the ground plane, as shown in section 6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

6.1. Description of Major Test Instruments

For Below 1GHz

Amplifier Parameters	Setting
Amplifier	(BURGEON BPA-530)
RF Gain	30 dB
Signal Input	0.01 MHz - 3 GHz

Test Receiver Parameters	Setting
Test Receiver	(R&S ESCI)
Resolution Bandwidth	120 kHz
Frequency Band	9 kHz - 3 GHz
Quasi-Peak Detector	ON for Quasi-Peak Mode
	OFF for Peak Mode

For above 1GHz

Amplifier Parameters	Setting
Amplifier	AGILENT / 8449B
RF Gain	35 dB
Signal Input	1 GHz - 26.5 GHz

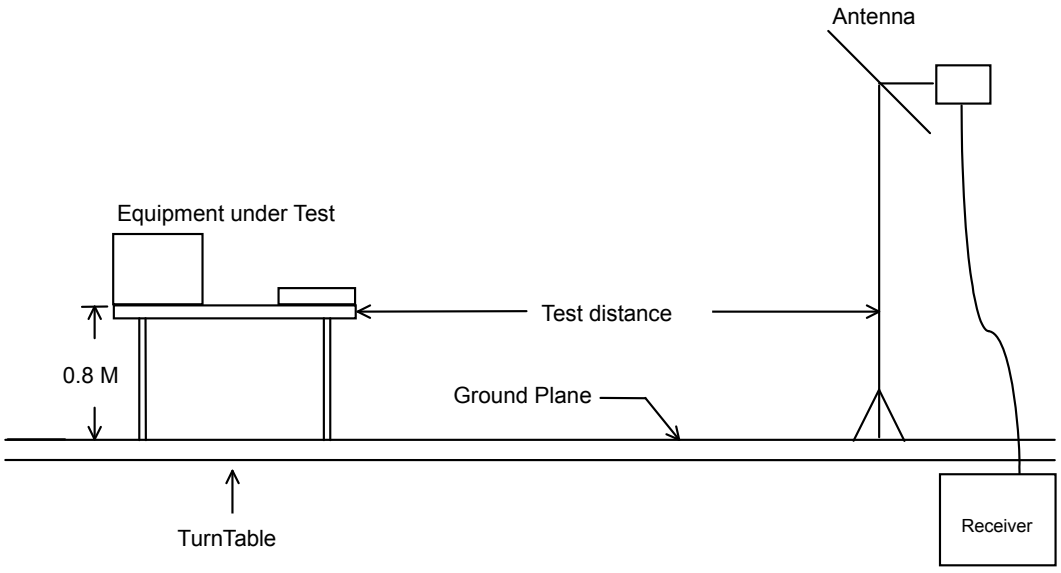
Spectrum Analyzer Parameters	Setting
Spectrum Analyzer	R&S FSP40
Attenuation	10 dB
Start Frequency	1 GHz
Stop Frequency	11 GHz
Resolution Bandwidth	1 MHz
Video Bandwidth	3 MHz
Signal Input	9 kHz - 40 GHz

6.2. Test Procedures

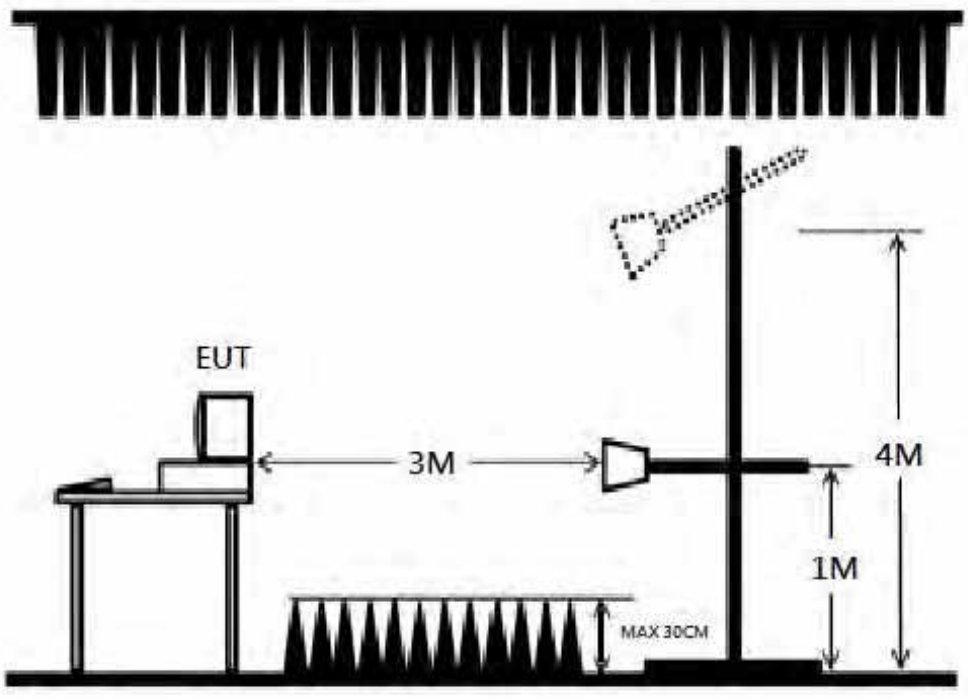
a. The EUT was placed on a rotatable table top 0.8 meter above ground.
b. The EUT was set 3m (above 1GHz)/10m(below 1GHz) from the interference-receiving antenna which was mounted on the top of a variable height antenna tower.
c. The table was rotated 360 degrees to determine the position of the highest radiation.
d. The antenna is a half wave dipole and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
f. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
g. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
h. The FCC Part 15.109 (g) permit parties seeking to authorize a digital device to choose to demonstrate that the device complies with either the Part 15 standards or the international standards found in Publication 22 of the International Special Committee on Radio Interference (CISPR).
i. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

6.3. Typical Test Setup Layout of Radiated Emission

For Below 1GHz



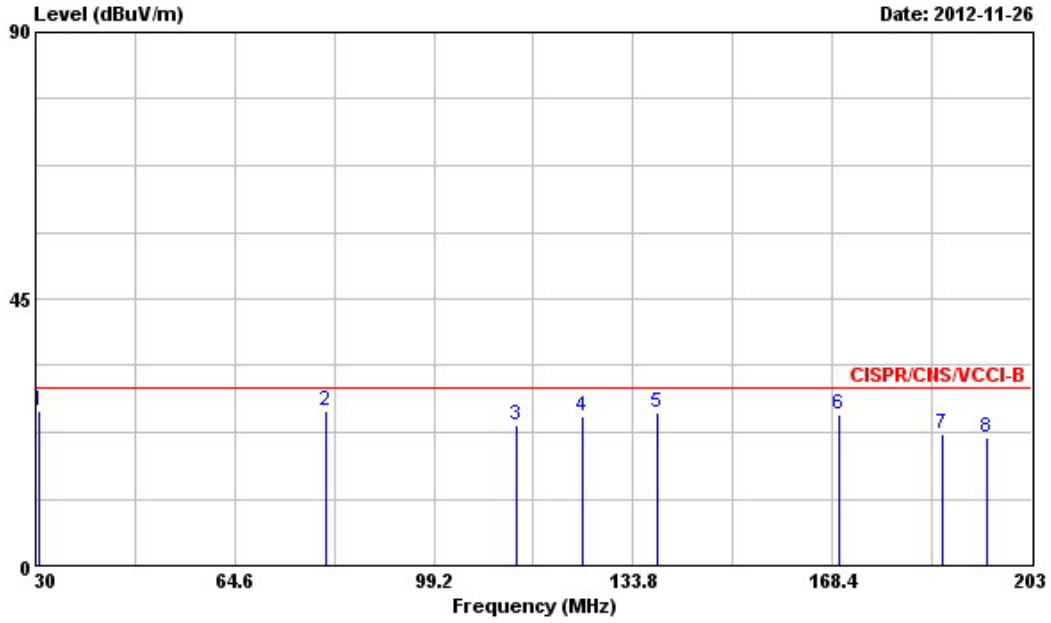
For above 1GHz



6.4. Test Result of Radiated Emission for Below 1GHz

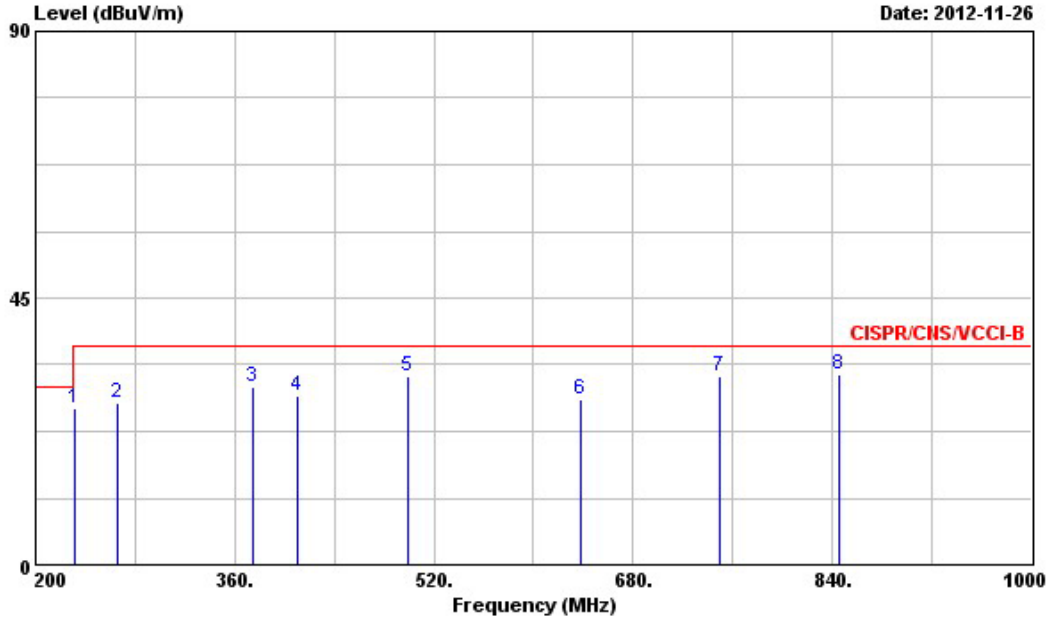
Test mode	Mode 1	Test Site No.	OS02-NH
Test frequency	30 MHz ~ 1000 MHz	Test Engineer	Chas
Temperature	22 ℃	Relative Humidity	61 %
Note: 1. Emission level (dBμV/m) = 20 log Emission level (μV/m)			
2. Corrected Reading : Antenna Factor + Cable Loss + Read Level – Preamp Factor = Level			
■ The test was passed at the minimum margin that marked by the frame in the following data			

Vertical



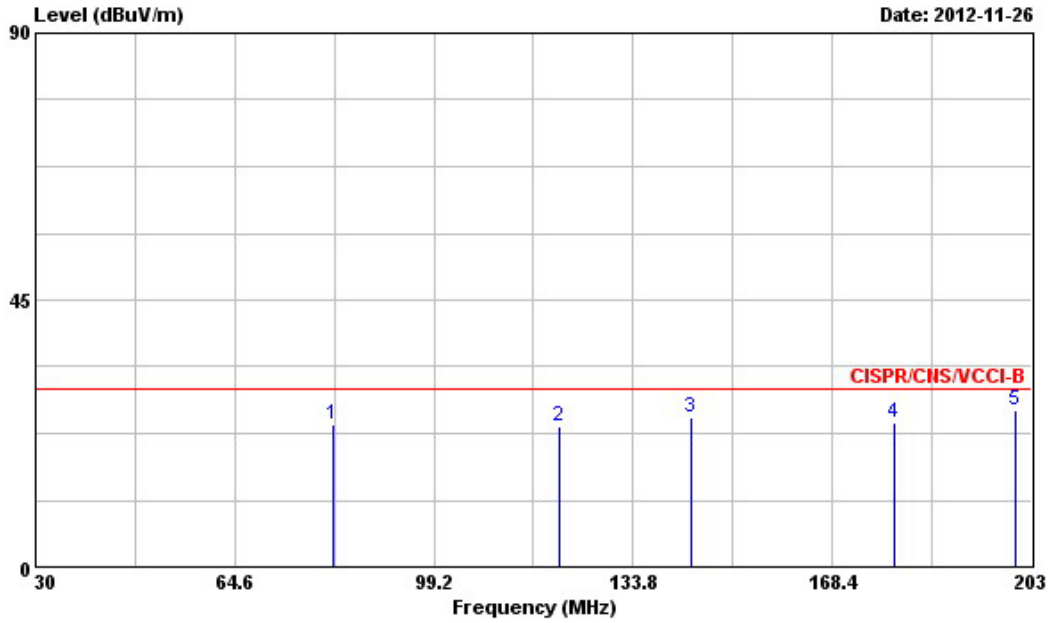
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	30.690	26.21	-3.79	30.00	38.17	18.50	1.28	31.74	Peak	---	---
2	80.520	26.21	-3.79	30.00	48.59	7.21	2.15	31.74	Peak	---	---
3	113.560	23.78	-6.22	30.00	40.79	11.83	2.80	31.64	Peak	---	---
4	125.150	25.09	-4.91	30.00	41.46	12.36	2.88	31.61	Peak	---	---
5	137.950	25.70	-4.30	30.00	43.07	11.06	3.15	31.58	Peak	---	---
6	169.610	25.47	-4.53	30.00	44.45	9.59	2.93	31.50	Peak	---	---
7	187.430	22.22	-7.78	30.00	42.03	9.14	2.51	31.46	Peak	---	---
8	195.220	21.56	-8.44	30.00	41.34	9.25	2.41	31.44	Peak	---	---

Vertical



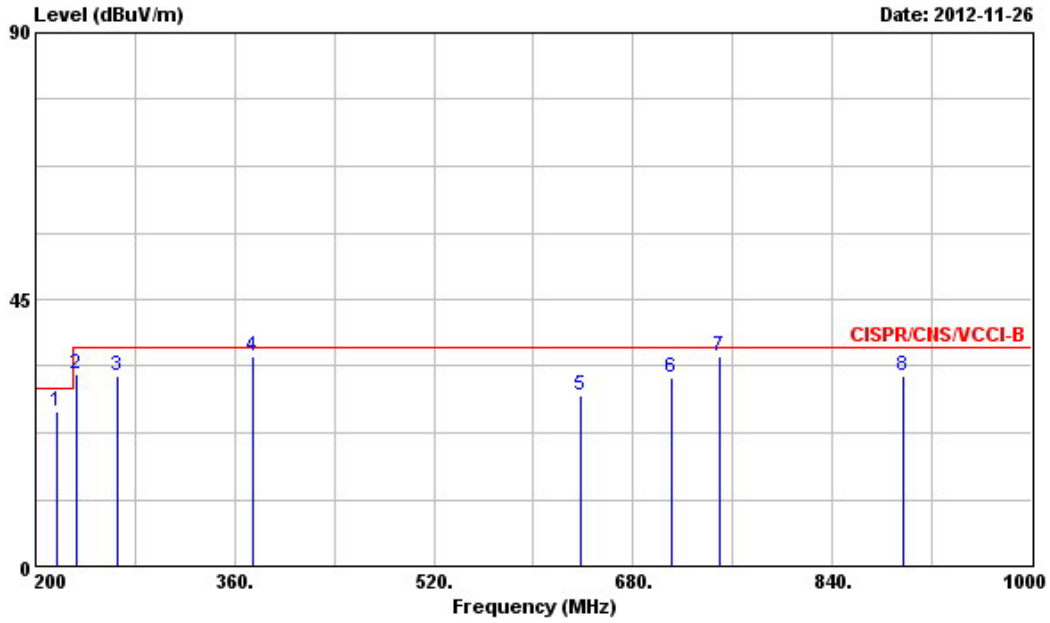
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	231.200	26.49	-10.51	37.00	44.02	11.18	2.69	31.40	Peak	---	---
2	265.600	27.45	-9.55	37.00	43.24	12.63	2.96	31.38	QP	---	---
3	374.400	29.91	-7.09	37.00	42.42	15.14	3.69	31.34	Peak	---	---
4	410.400	28.50	-8.50	37.00	39.93	15.97	3.94	31.34	Peak	---	---
5	499.200	31.71	-5.29	37.00	40.90	17.55	4.58	31.32	Peak	---	---
6	638.400	27.80	-9.20	37.00	34.40	19.18	5.48	31.26	Peak	---	---
7	749.600	31.70	-5.30	37.00	36.77	19.98	6.25	31.30	QP	---	---
8	844.800	32.09	-4.91	37.00	35.44	21.07	6.86	31.28	Peak	---	---

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	81.730	24.05	-5.95	30.00	46.27	7.36	2.16	31.74	Peak	---	---
2	121.000	23.71	-6.29	30.00	40.04	12.47	2.83	31.63	Peak	---	---
3	144.010	25.14	-4.86	30.00	42.83	10.61	3.27	31.57	Peak	---	---
4	179.130	24.22	-5.78	30.00	43.68	9.09	2.92	31.47	Peak	---	---
5	200.060	26.26	-3.74	30.00	45.88	9.32	2.48	31.42	QP	---	---

Horizontal

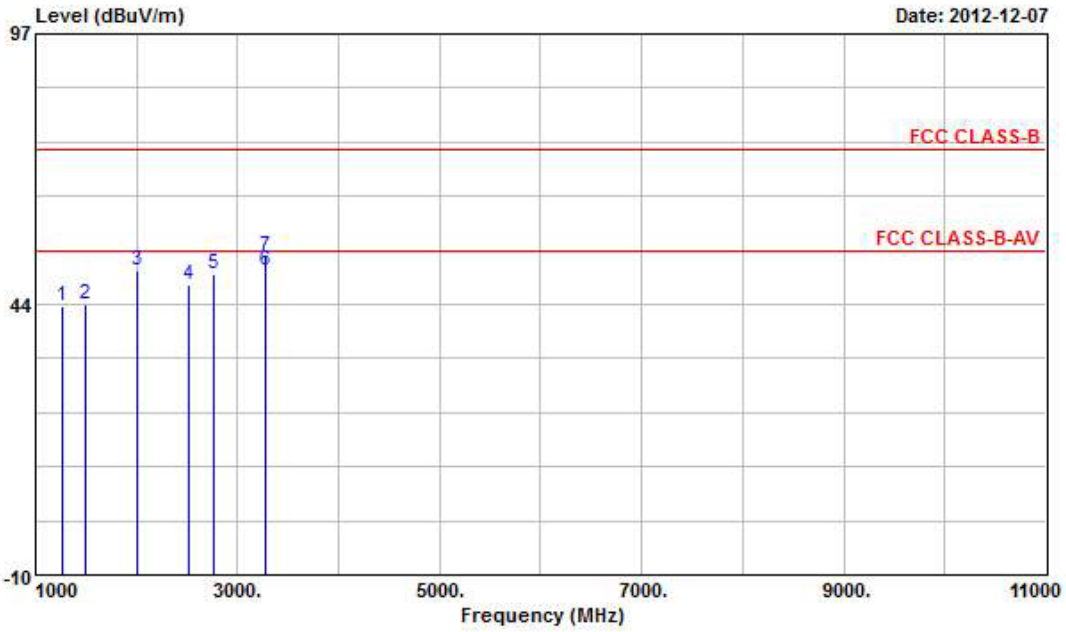


	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	216.800	26.05	-3.95	30.00	44.50	10.37	2.59	31.41	QP	---	---
2	233.600	32.34	-4.66	37.00	49.67	11.36	2.71	31.40	Peak	---	---
3	265.600	32.21	-4.79	37.00	48.00	12.63	2.96	31.38	QP	---	---
4 @	374.400	35.49	-1.51	37.00	48.00	15.14	3.69	31.34	QP	200	180
5	638.400	28.66	-8.34	37.00	35.26	19.18	5.48	31.26	Peak	---	---
6	711.200	31.88	-5.12	37.00	37.60	19.48	6.06	31.26	Peak	---	---
7 @	749.600	35.35	-1.65	37.00	40.42	19.98	6.25	31.30	QP	---	---
8	896.800	31.97	-5.03	37.00	34.28	21.59	7.30	31.20	Peak	---	---

6.5. Test Result of Radiated Emission for Above 1GHz

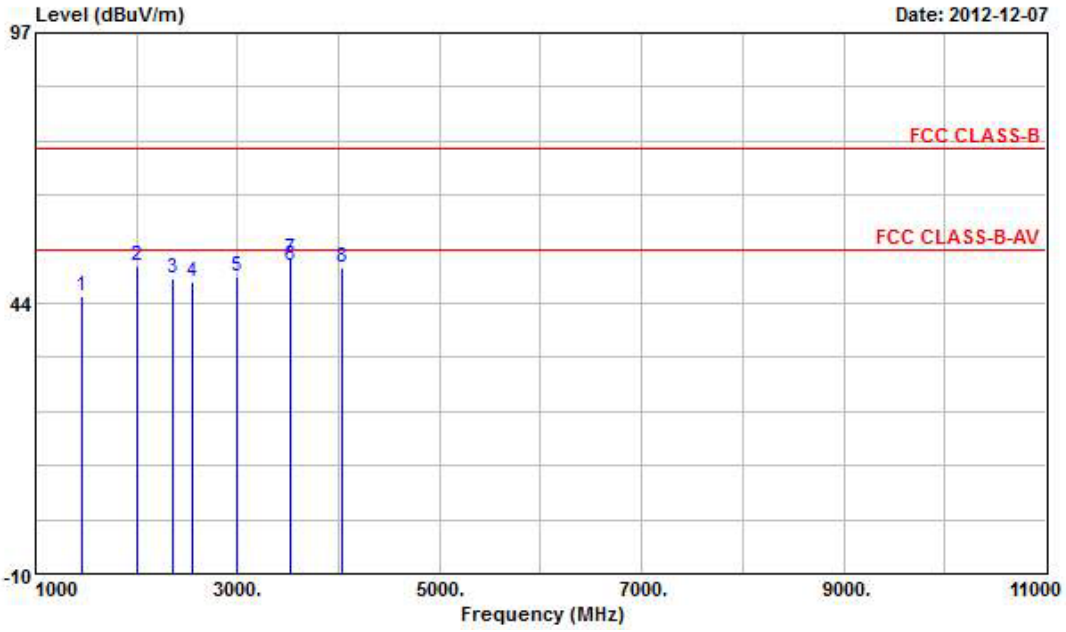
Test mode	Mode 1	Test Site No.	03CH04-HY
Test frequency	1 GHz ~ 11 GHz	Test Engineer	Kevin
Temperature	21 ℃	Relative Humidity	50 %
Note: 1. Emission level (dBμV/m) = 20 log Emission level (μV/m)			
2. Corrected Reading : Antenna Factor + Cable Loss + Read Level – Preamp Factor = Level			
■ The test was passed at the minimum margin that marked by the frame in the following data			

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1260.000	43.20	-30.80	74.00	46.78	27.94	34.05	2.52	---	---	Peak
2	1500.000	43.55	-30.45	74.00	46.67	27.80	33.70	2.79	---	---	Peak
3	2014.000	50.15	-23.85	74.00	49.08	31.43	33.71	3.34	---	---	Peak
4	2518.000	47.26	-26.74	74.00	44.80	32.42	33.82	3.86	---	---	Peak
5	2772.000	49.38	-24.62	74.00	46.48	32.77	34.01	4.14	---	---	Peak
6	3273.000	50.35	-3.65	54.00	46.85	33.04	34.20	4.66	---	---	Average
7	3273.000	53.01	-20.99	74.00	49.51	33.04	34.20	4.66	---	---	Peak

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	1460.000	45.07	-28.93	74.00	48.29	27.82	33.77	2.73	---	---	Peak
2	2014.000	50.72	-23.28	74.00	49.65	31.43	33.71	3.34	---	---	Peak
3	2358.000	48.31	-25.69	74.00	46.24	32.12	33.77	3.71	---	---	Peak
4	2550.000	47.85	-26.15	74.00	45.31	32.47	33.84	3.91	---	---	Peak
5	2990.000	48.84	-25.16	74.00	45.60	33.08	34.20	4.36	---	---	Peak
6 @	3525.000	50.80	-3.20	54.00	47.04	33.05	34.20	4.90	100	333	Average
7	3525.000	52.15	-21.85	74.00	48.39	33.05	34.20	4.90	---	---	Peak
8	4029.000	50.65	-23.35	74.00	45.59	33.76	34.11	5.41	---	---	Peak

7. Photographs of Test Configuration

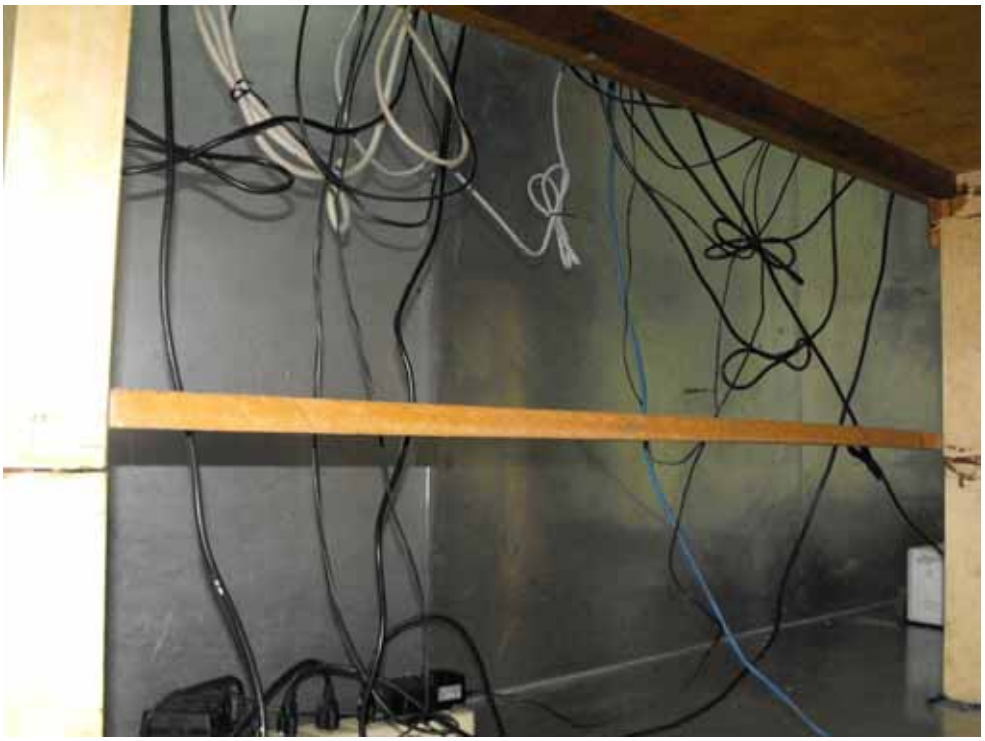
7.1. Photographs of AC Powerline Conducted Emissions Test Configuration

● The photographs show the configuration that generates the maximum emission.

FRONT VIEW

REAR VIEW

SIDE VIEW

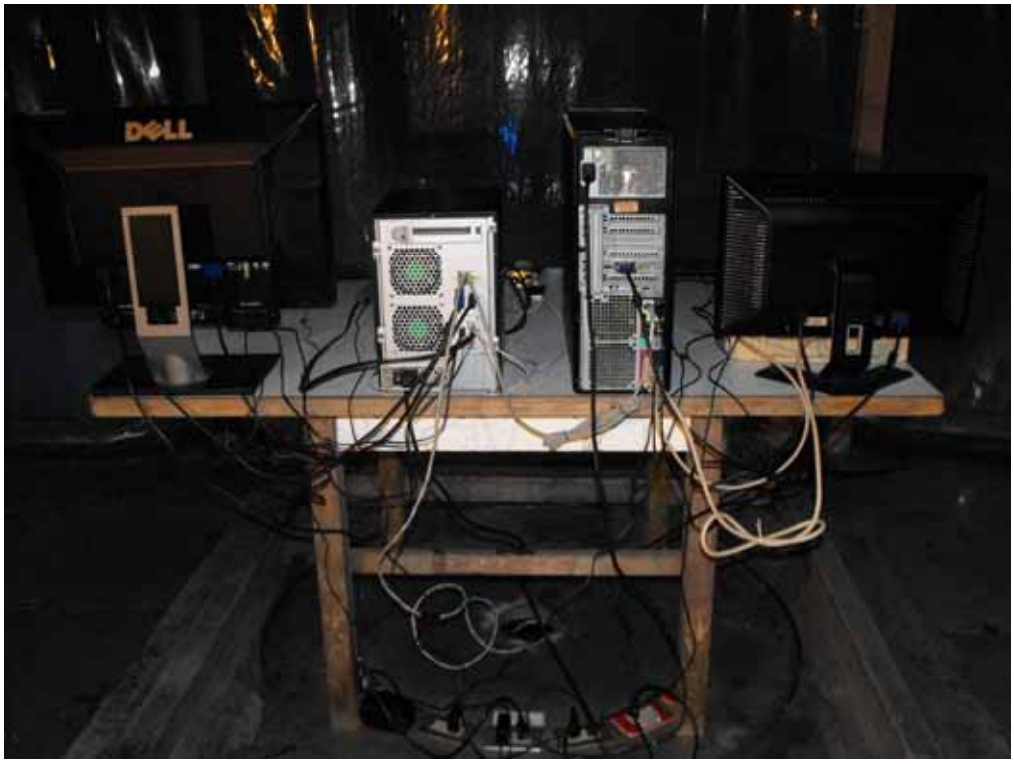


7.2. Photographs of Radiated Emissions Test Configuration

● The photographs show the configuration that generates the maximum emission.
For Below 1GHz

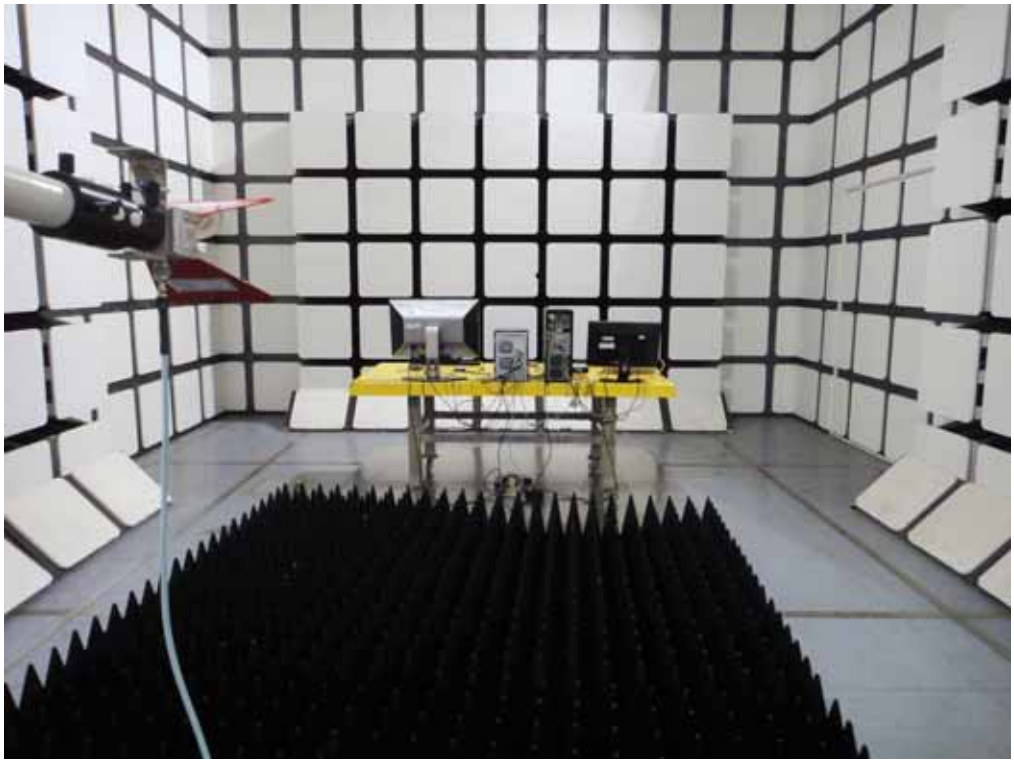
FRONT VIEW

REAR VIEW

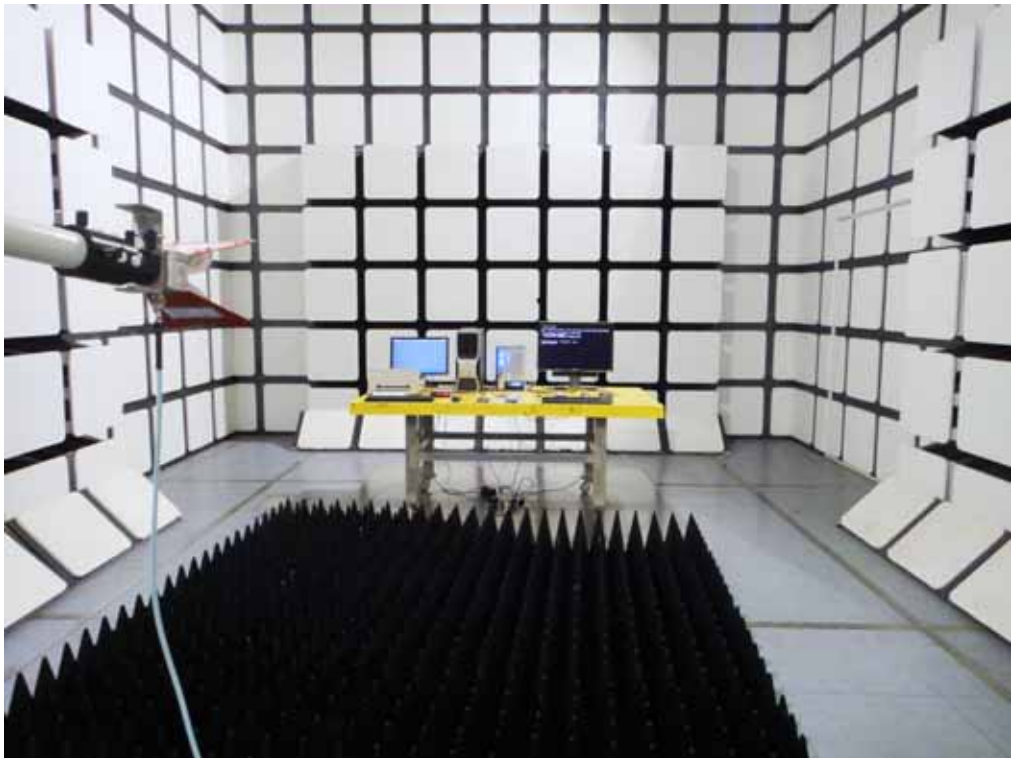


● The photographs show the configuration that generates the maximum emission.
For Above 1GHz

FRONT VIEW



REAR VIEW



8. List of Measuring Equipment Used

Conducted Emission

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Receiver	R&S	ESCS 30	100167	9 kHz - 2.75 GHz	Sep. 24, 2012	Conduction (CO01-NH)
LISN	SCHAFFNER	NNB41	04/10053	9kHz - 30MHz	Nov. 20, 2012	Conduction (CO01-NH)
Power Filter	CORCOM	MR12030	N/A	30A*2	NCR	Conduction (CO01-NH)
RF Cable-CON	Suhner Switzerland	RG223/U	CB004	9kHz - 30MHz	Dec. 13, 2011	Conduction (CO01-NH)

Note: Calibration Interval of instruments listed above is one year.
NCR: NO CALIBRATION REQUEST.

Radiation Emission Below 1GHz

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	BURGEON	BPA-530	100203	0.01 MHz - 3 GHz	Jun. 01, 2012	Radiation (OS02-NH)
Receiver	R&S	ESCI	100497	9 kHz – 3 GHz	Apr. 17, 2012	Radiation (OS02-NH)
Bilog Antenna	CHASE	CBL6122B	2884	30 MHz - 2 GHz	Feb. 11, 2012	Radiation (OS02-NH)
Turn Table	EMCO	2080	9508-1805	0 - 360 degree	NCR	Radiation (OS02-NH)
Antenna Mast	ETS	2075-2	2385	1 m - 4 m	NCR	Radiation (OS02-NH)
RF Cable-R10m	MIYAZAKI	5DFB	CB044	30 MHz - 1 GHz	Sep. 14, 2012	Radiation (OS02-NH)

Note: Calibration Interval of instruments listed above is one year.
NCR: NO CALIBRATION REQUEST.

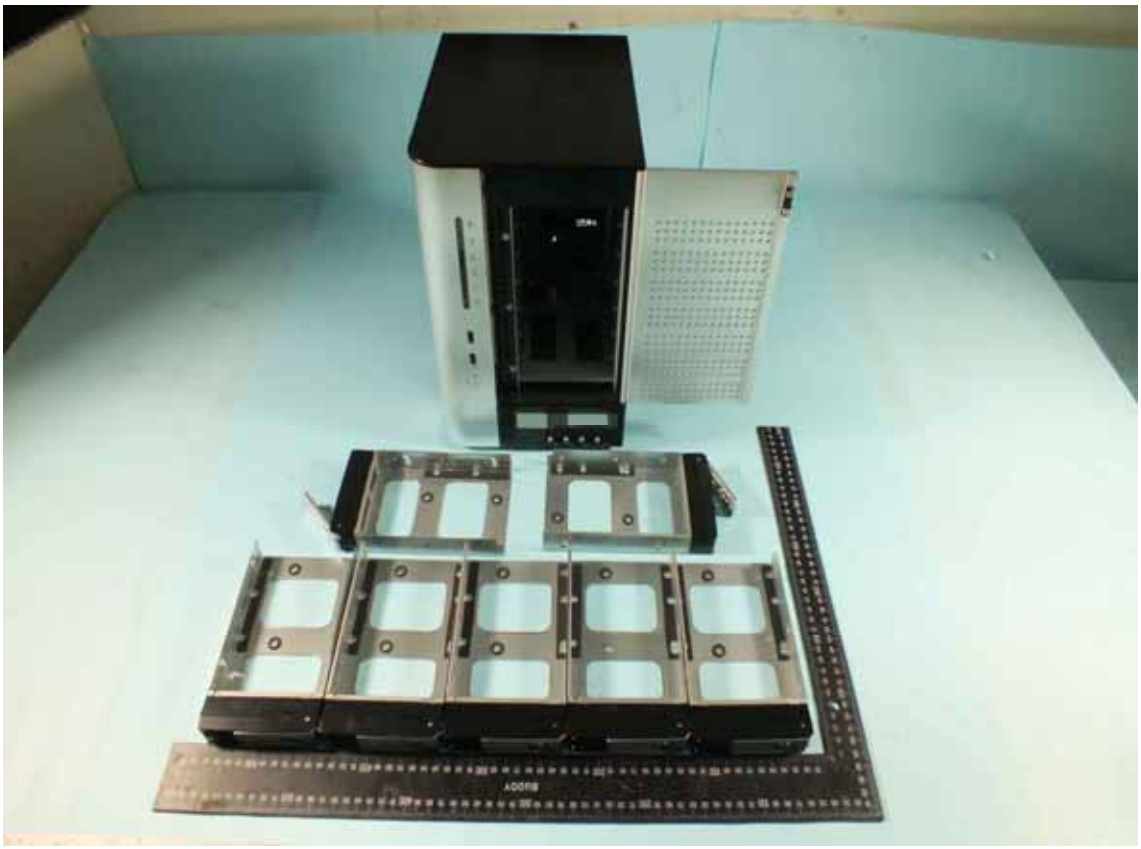
Radiation Emission Above 1GHz

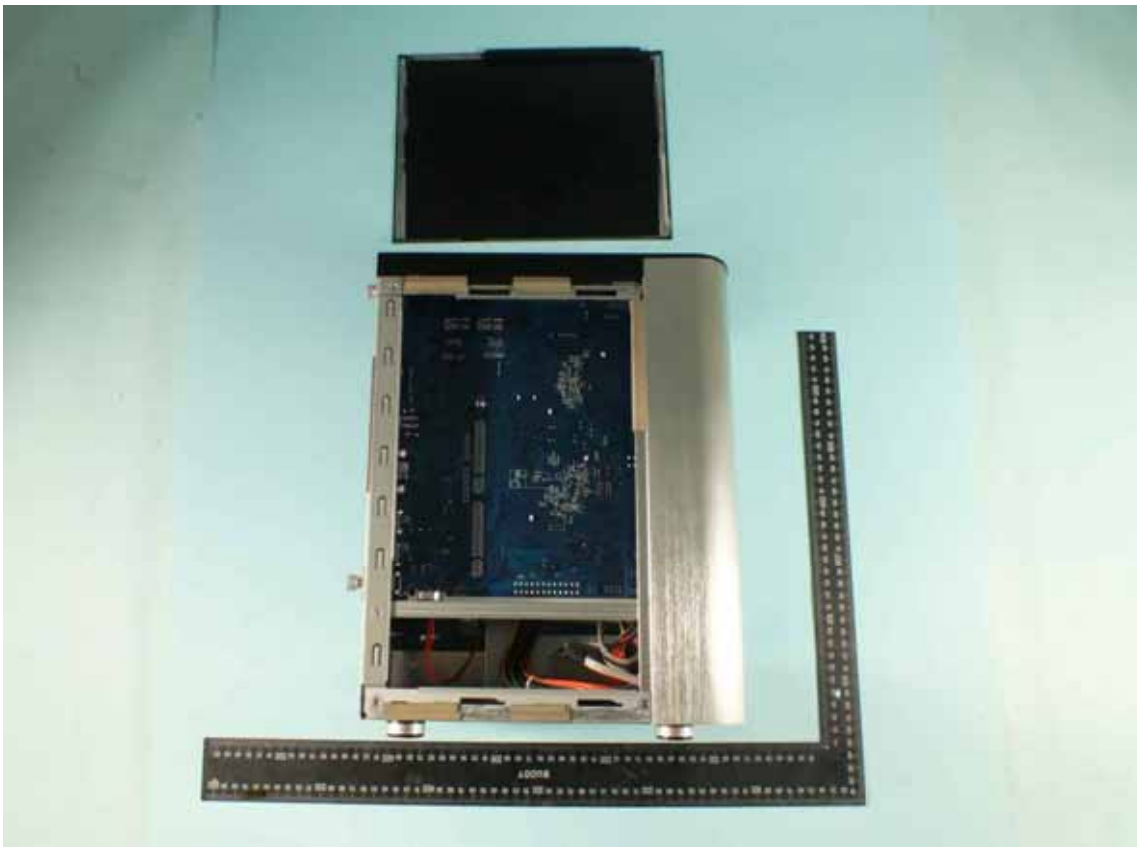
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH04-HY	30 MHz ~ 1 GHz 3m	Oct. 20, 2012	Radiation (03CH04-HY)
Spectrum Analyzer	R&S	FSP40	100593	9 kHz ~ 40 GHz	Sep. 14, 2012	Radiation (03CH04-HY)
Amplifier	Agilent	8449B	3008A02326	1 GHz ~ 26.5 GHz	Mar. 09, 2012	Radiation (03CH04-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	CB063-HF	1 GHz ~ 40 GHz	Nov. 21, 2012	Radiation (03CH04-HY)
Horn Antenna	ETS	3117	00075954	1 GHz ~ 18 GHz	Oct. 31, 2012	Radiation (03CH04-HY)
Turn Table	Chaintek	3000	*	0 ~ 360 degree	NCR	Radiation (03CH04-HY)
Antenna Mast	Chaintek	*	*	1 m ~ 4 m	NCR	Radiation (03CH04-HY)

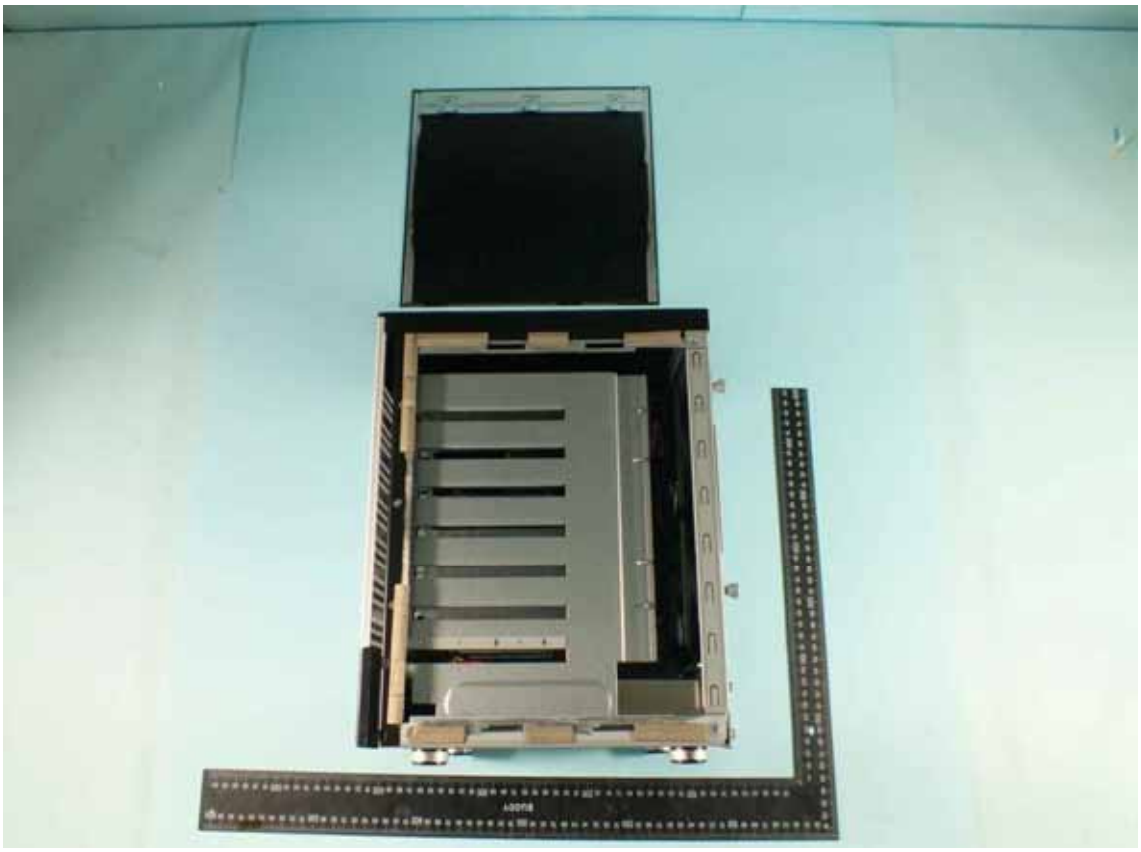
Note: Calibration Interval of instruments listed above is one year.
NCR: NO CALIBRATION REQUEST.

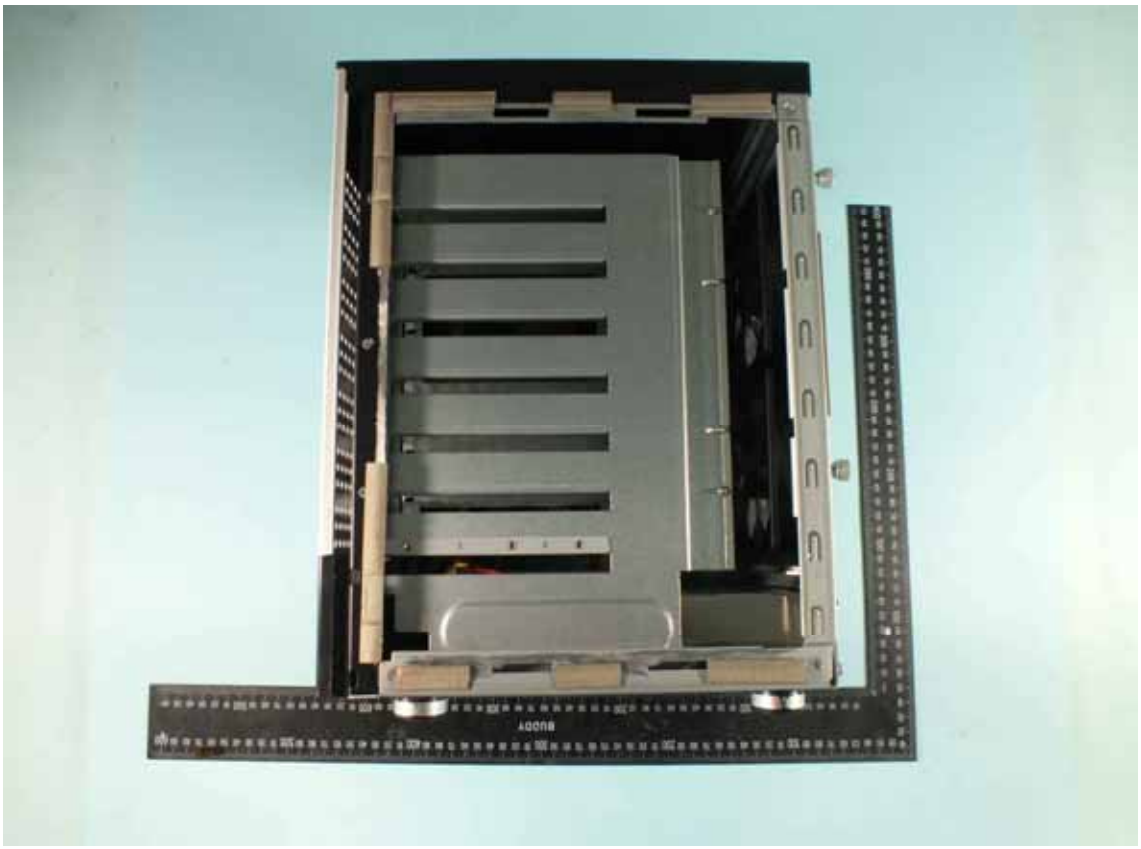
APPENDIX A. Photographs of EUT

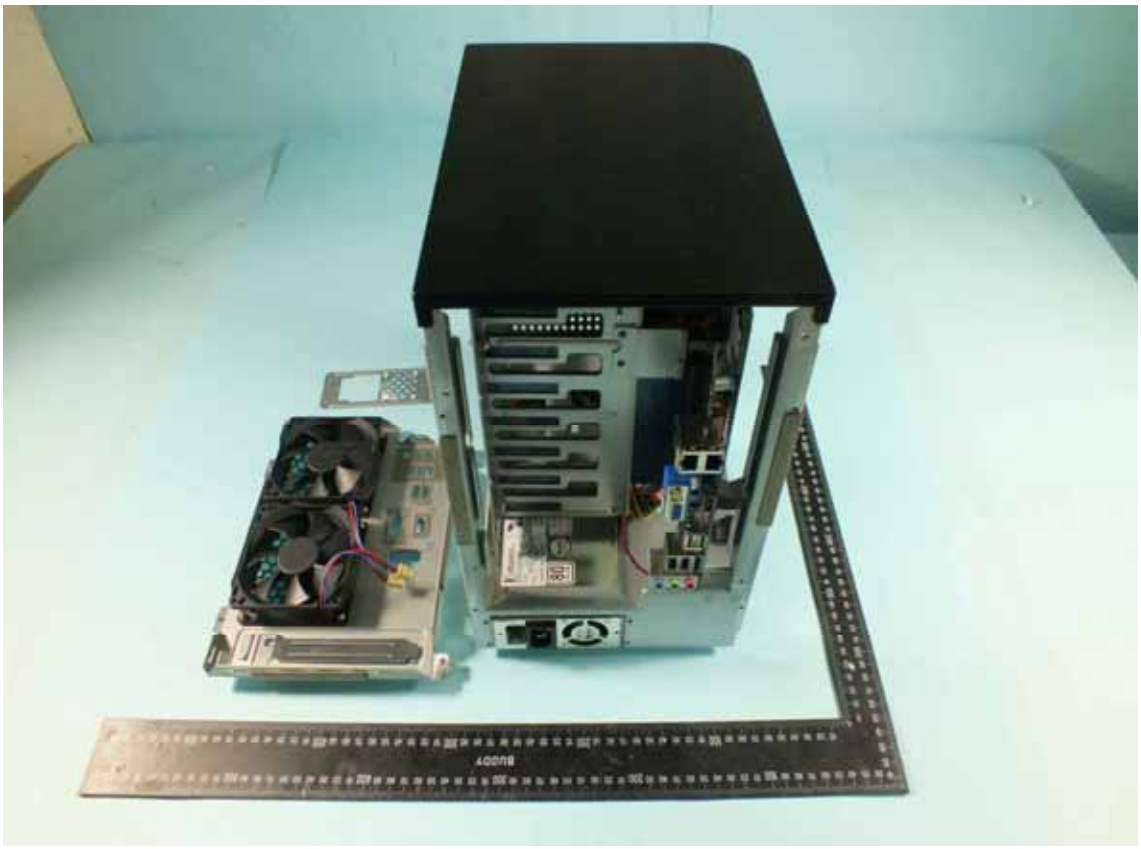
LAN2
WAN
LAN1
VGA
HDMI
IN
OUT
MIC

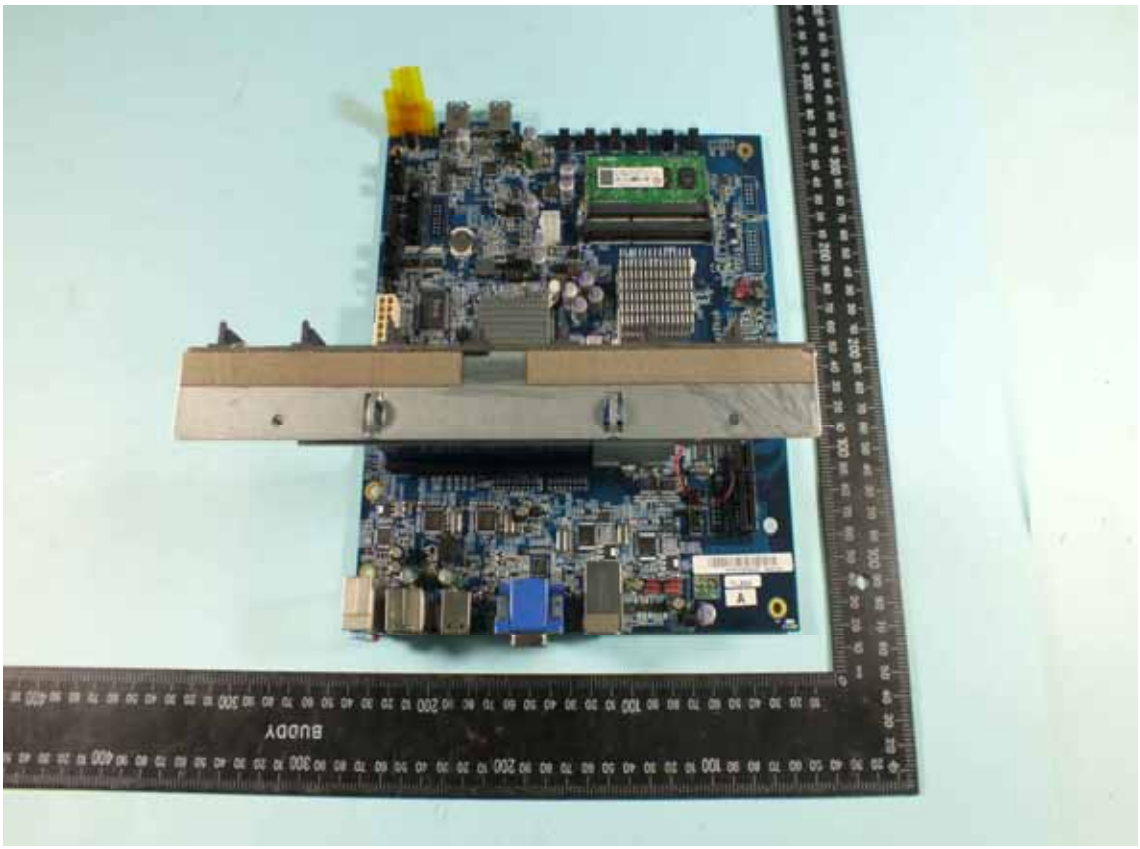


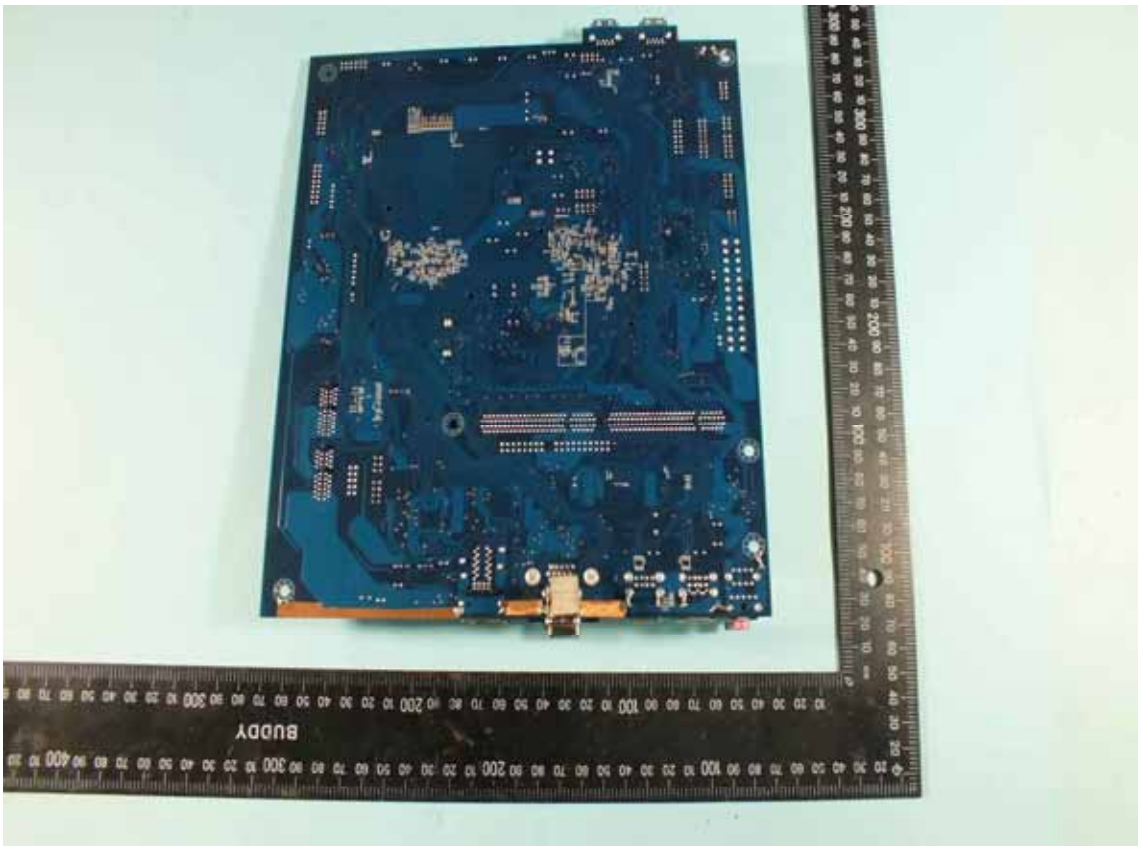


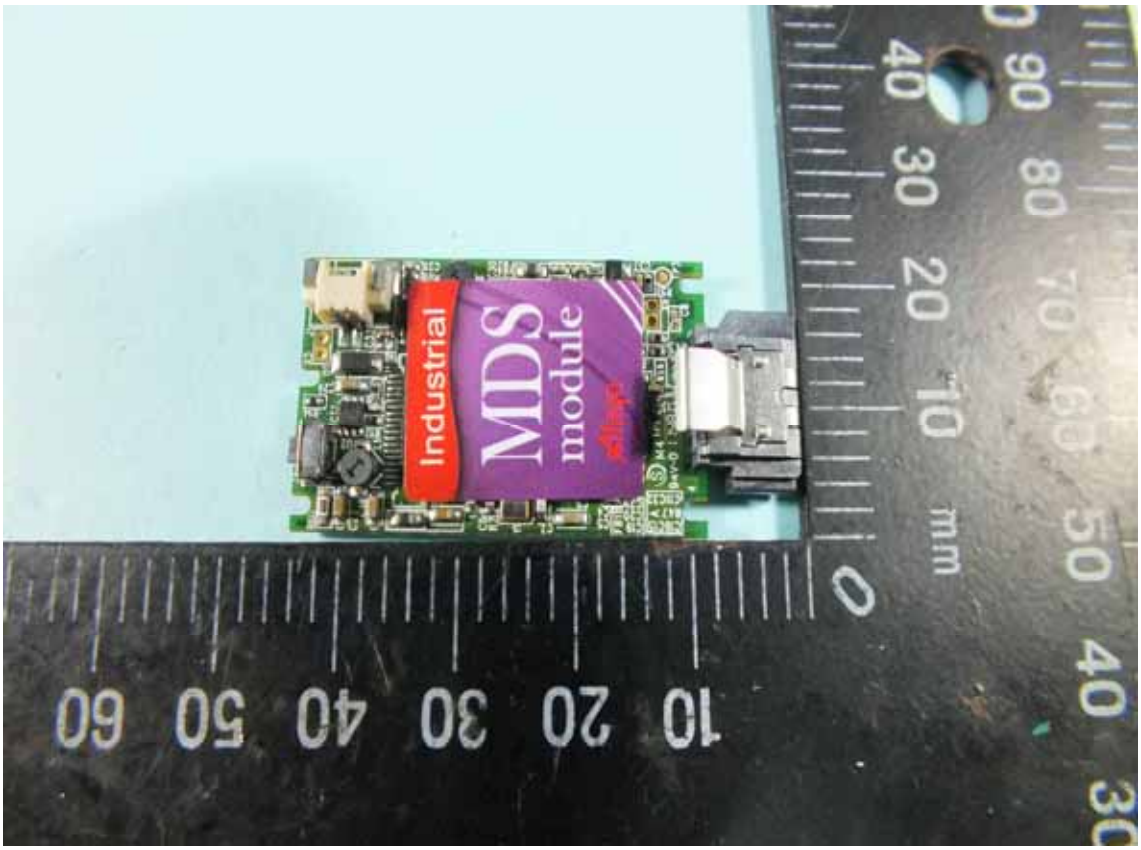






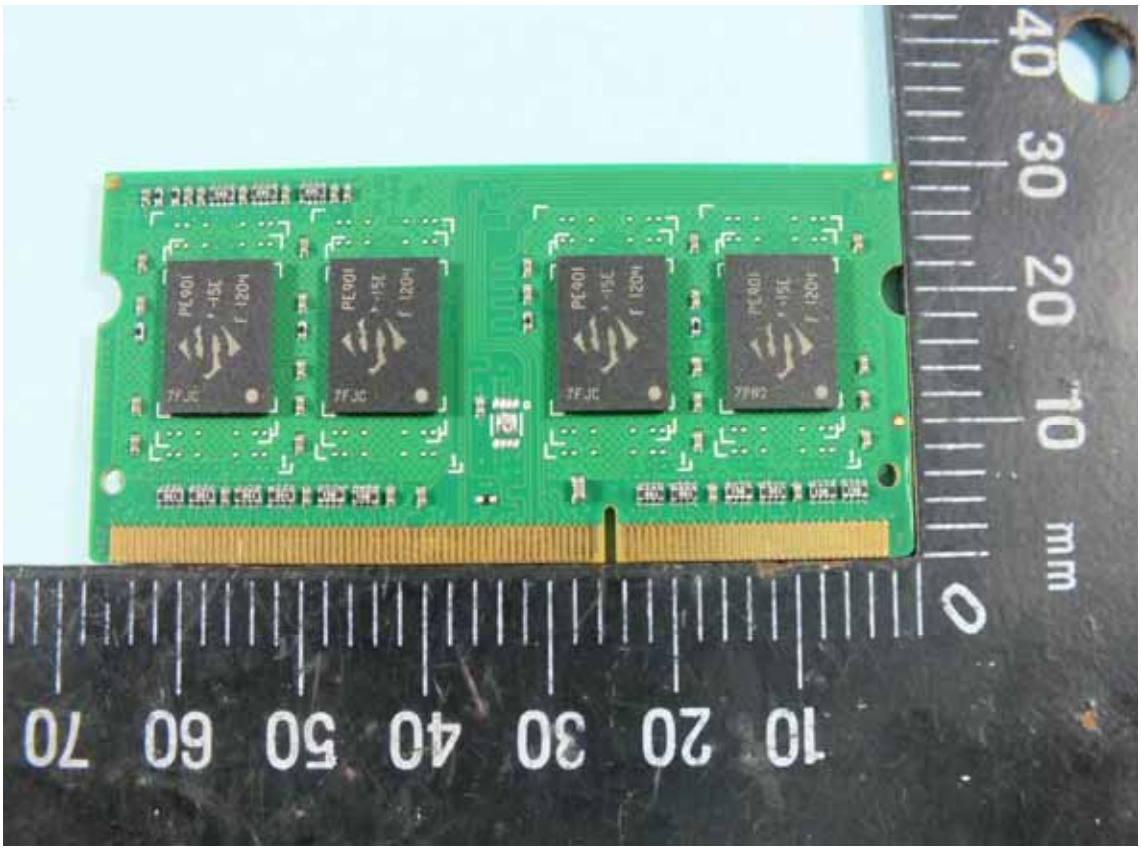


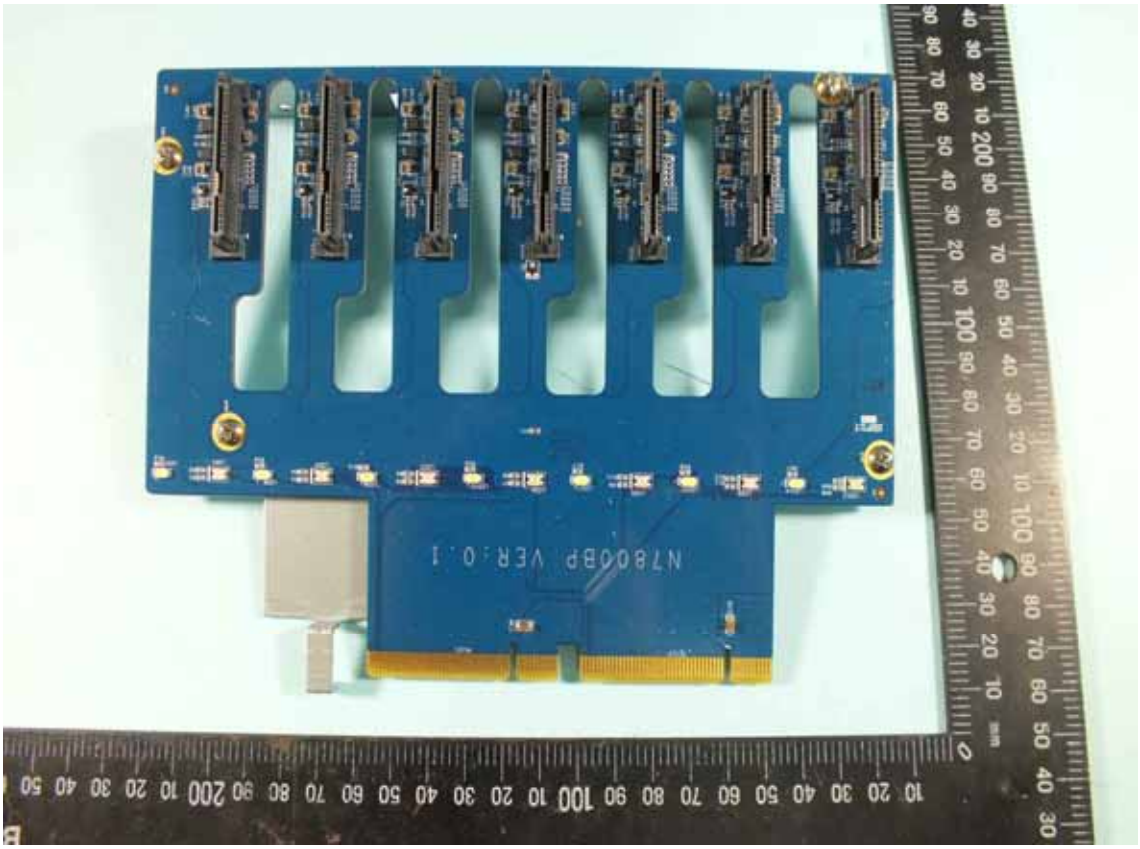


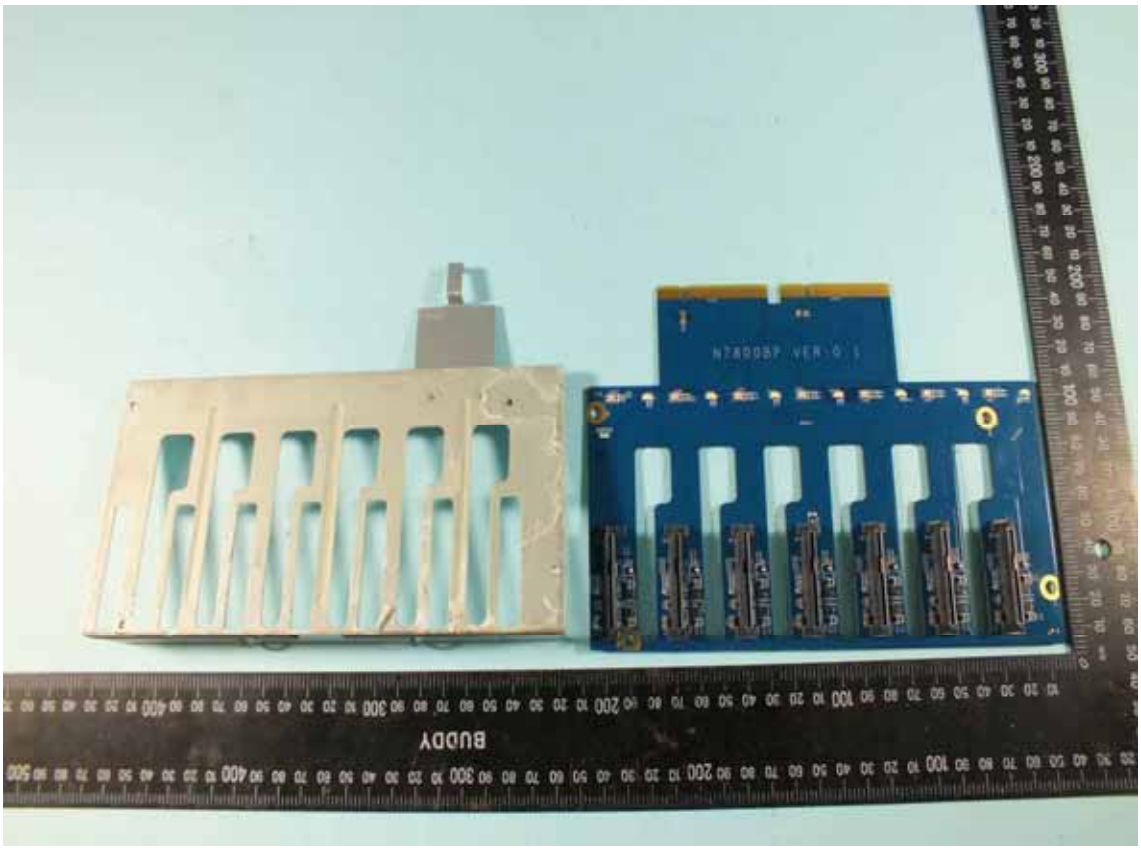

Industrial
MDS
module

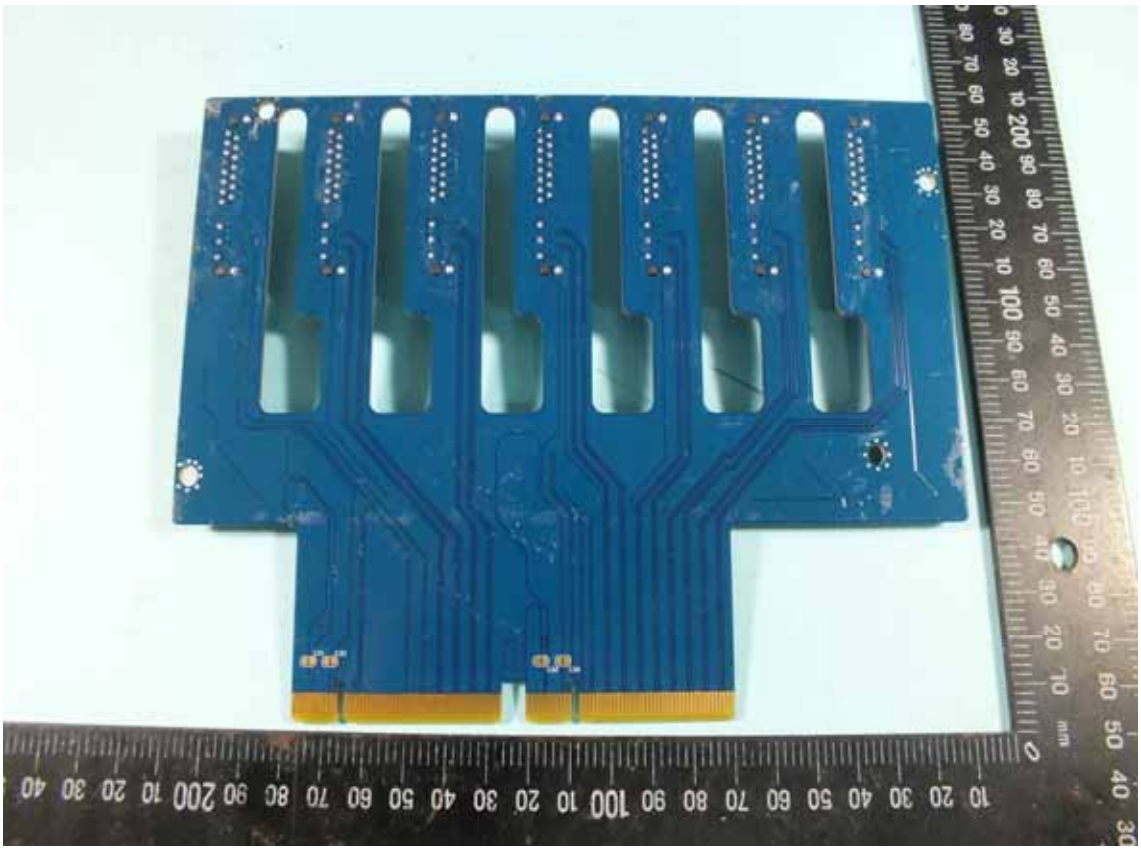
1GB
1600/U/PRO/
N28/4800/5550
V2 03 01
MDS7VJM001GBPC2
RoHS

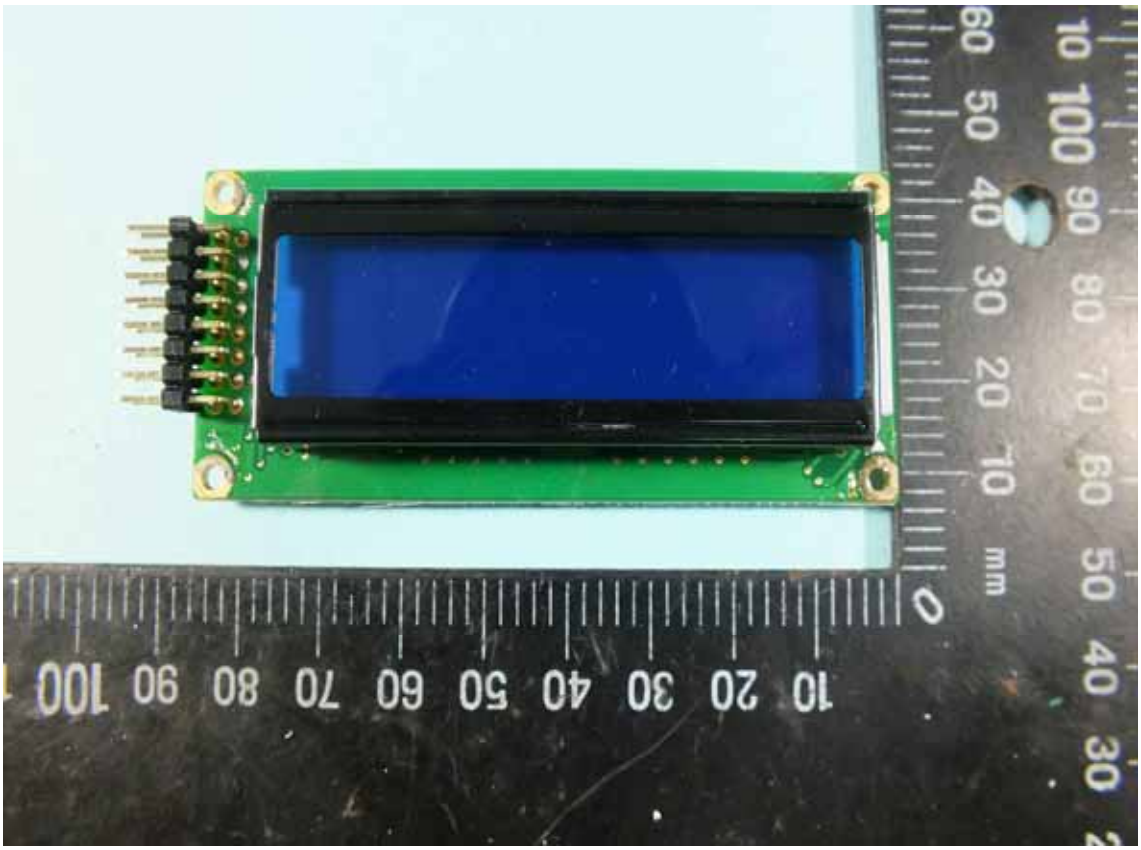
09-2820
2G DDR3 1333 SODIMM CL9
617404-7751 RoHS [OO]
Transcend



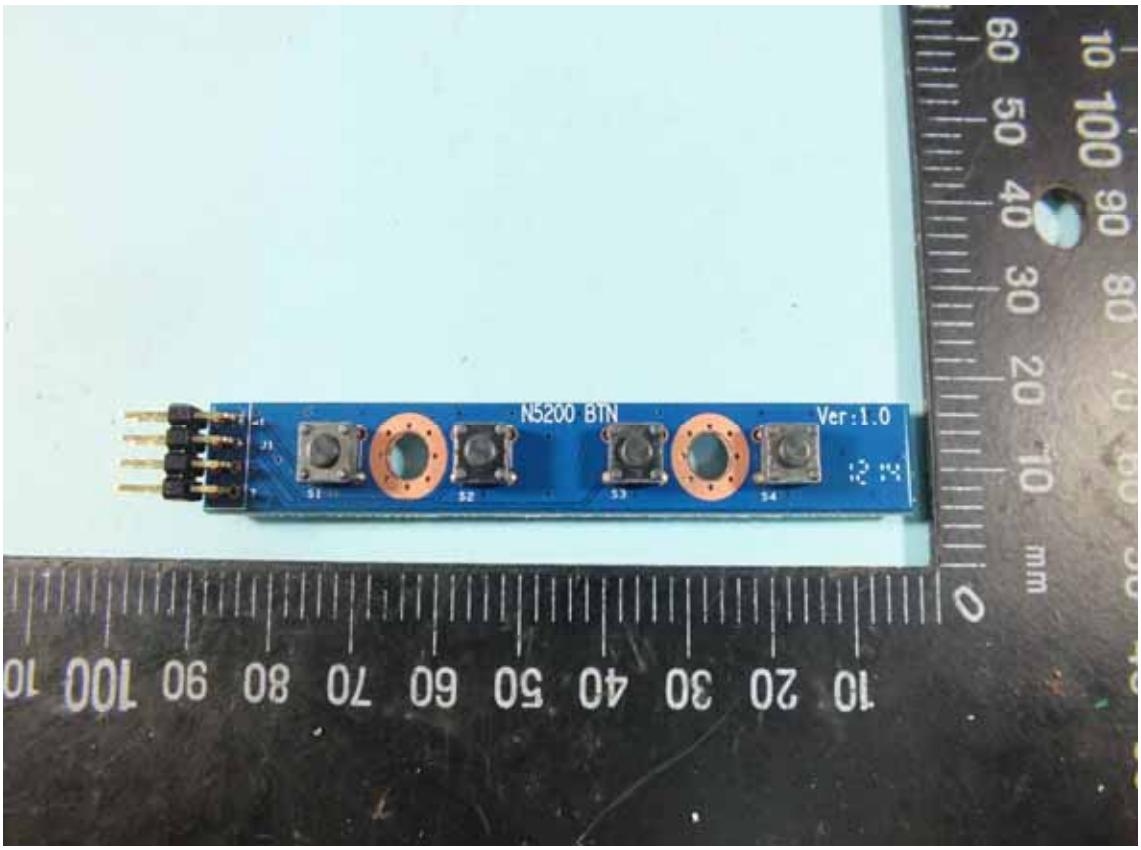


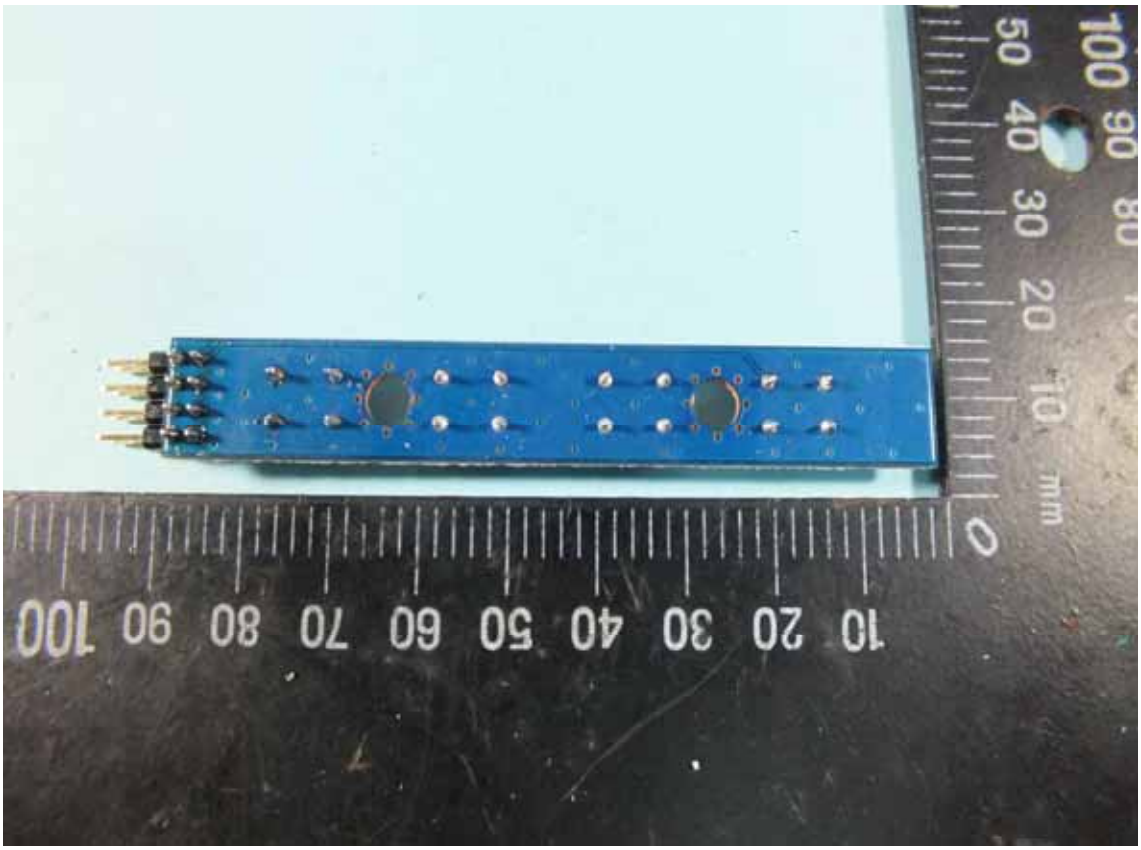


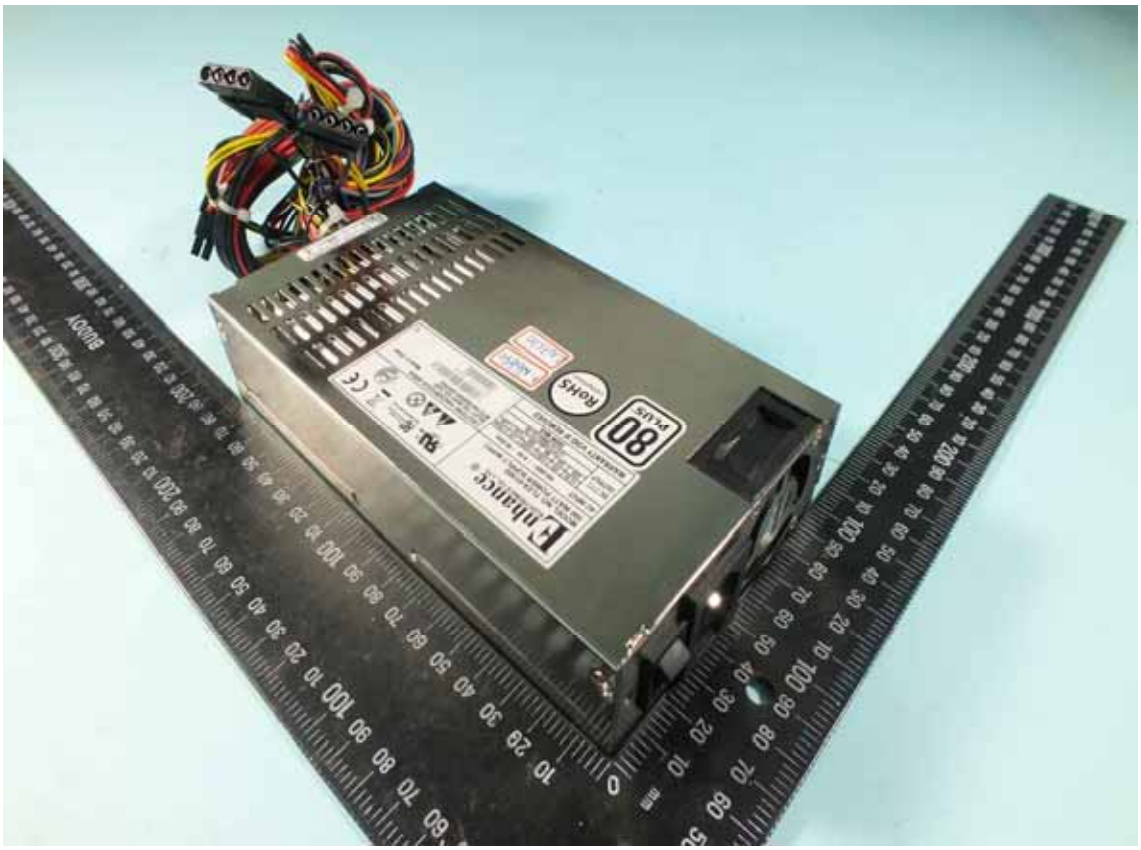




1602C Rev A


N5200 BTN
Ver:1.0





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ELECTRONICS CO., LTD.
MODEL NO: FLEX-0130D
300 WATT POWER SUPPLY W/PFC
AC INPUT 100-240V ~ / 6-3A / 60-50Hz
+3.3V +5V +12V1 +12V2 -12V +5Vsb
22A 12A 6A 16A 0.3A 2.5A
DC OUTPUT
300W MAX.
WARRANTY VOID IF REMOVED
FOR HOME OR OFFICE USE
CAUTION! HAZARDOUS AREA
SELECT THE RIGHT VOLTAGE!
WITH FAN SENSOR CONTROL
Made In China
S/N:1151 00390
80 PLUS
RoHS compliant
1. N6850
2. N7510